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Preschool teachers' strategies of socializing children's emotion regulation

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Preschool teachers' strategies of socializing children's emotion regulation

by

Mona Diane Diaz Berkey

A thesis submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Major: Human Development and Family Studies (Early Childhood Education)

Major Professor: Joan E. Herwig

Iowa State University

Ames, Iowa

2000

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Graduate College
Iowa State University

This is to certify that the Master's thesis of
Mona Diane Diaz Berkey
has met the thesis requirements of Iowa State University

Signatures have been redacted for privacy

Dedicated with loving memory
to my mother,
Cynthia June Diaz.

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ABSTRACT

The purpose of this study was to determine the type and frequency of socialization strategies preschool teachers used to regulate young children's emotions in the preschool setting. In addition, this study also investigated the difference between preschool teachers of National Academy of Early Childhood Programs (NAECP) and non-NAECP accredited child care programs concerning socialization strategies used in response to young children's emotion. Participants were head teachers of 3- and 4-year-old children who represented 47 community based child care centers in Iowa. Twenty-four of the preschool teachers were employed in NAECP-accredited centers and 23 were employed in NAECP-non-accredited programs. Preschool teachers of both accredited and non-accredited centers had similar demographic characteristics and reported using similar socialization strategies in response to children's emotions. Teachers from both types of programs reported feeling well prepared and very well prepared in the their level of academic preparation in classroom instruction involving children's emotions. In addition, teachers reported feeling confident in their ability to teach children about how to deal with their emotions. Preschool teachers reported using a variety of strategies in response to children's emotions, and they were more likely to use such strategies as discussion, instruction, comfort, acknowledge/validate, problem solving, and modeling. Preschool teachers were less likely to report using the ignore and diffuse strategies in response to children's emotions. In addition, preschool teachers most frequently reported using the discussion strategy in response to children's expression of happiness and anger and the comfort and discussion strategies in response to children's sadness and fear.

CHAPTER 1: INTRODUCTION

During group time, Sammy, a four-year-old, raises his hand for a turn to answer the teacher's question about dinosaurs. When the teacher chooses another child to answer the question Sammy shouts, "No fair, I want a turn," puts his head down, and begins to cry. The teacher reminds Sammy about the class rule that children respect one another and take turns. When a similar incident occurs the next day during group time, the teacher decides to ignore Sammy. When Sammy continues to cry, the teacher instructs him to either calm himself or take a "calm time" away from the group. Sammy walks slowly to the place designated as the calm spot in the classroom while crying loudly and struggling to gain his composure. The teacher continues with the group time activity and periodically glances up at Sammy. By the end of the activity, Sammy has stopped crying. The teacher smiles at Sammy and invites him to return to the large group carpet for story time.

Early childhood programs are important contexts in which young children learn the functions of emotions (Denham, 1998; Hyson & Lee, 1996; Maccoby, 1980). As illustrated in the anecdote above with Sammy, young children encounter stressful situations that may not correspond with their immediate wishes or desires, such as waiting for a turn, sharing a desirable object, or conforming to classroom routines (Hyson, 1994; Kopp, 1989; Sroufe, 1996). Early childhood teachers play an important role in teaching young children not only how to label and talk about emotions, but also how to manage their emotions appropriately within social interactions with peers and adults (Hyson, 1994; White & Howe, 1998). This is an essential emotional and social skill referred to as emotion regulation. More specifically, Thompson (1994) has defined emotion regulation as "the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially

their intensive and temporal features to accomplish one's goals" (p. 28).

The study of the development of emotion regulation has grown through the past decade. The role of emotions has changed from being viewed as disorganizing and disruptive behaviors to the capability to motivate, organize, and direct individual behavior (Izard & Malatesta, 1987; Thompson, 1990).

The ability to regulate emotions is viewed as an essential life skill and is included as a component of emotional competence (Denham, 1998; Saarni, 1990) and as a construct of emotional intelligence (Salvoey & Mayer, 1990). The ability of emotion regulation, particularly in the peer arena, is considered a major developmental milestone in the preschool years (Denham, McKinley, Couchoud, & Holt, 1990; Hyson, 1994; Sroufe, 1996).

The ability to regulate emotional experience and expression has been shown to influence the quality of children's social interactions and relationships (Rubin, Coplan, & Fox, 1995). To illustrate, children who cannot inhibit the timing or conditions for expressing emotion will not be effective social partners (Parke, 1994). Children who can regulate negative emotions so that they are not overly aroused interact in more adaptive ways with peers (Eisenberg, Fabes, Carlo, & Karbon, 1992).

Research has focused on parents as the primary socializing agent in teaching young children how to regulate their emotions. Parent socialization is defined as the activities that guide, shape, and instruct children concerning culturally desirable ways of how and when to management emotions that occur in social interactions (Casey & Fuller, 1994; Hyson, 1994; Strayer, 1986). Parents influence the development of children's emotion regulation by how they react to their children, discuss emotions with children, and express their own emotions in the presence of their children (Denham, 1998; Eisenberg, 1998; Thompson, 1990).

With young children spending more time in out-of-home care, researchers have become interested in how early childhood educators influence the development of emotion regulation (Hyson & Lee, 1996; Pianta, 1997; White & Howe, 1998). Gordon (1989) and Thompson (1990) assert that nonparental caregivers serve important socializing agents in the development of emotion regulation. Through their interactions with young children, caregivers and other adults guide a child's emotion regulation in respect to their own personal beliefs about emotion and cultural prescriptions related to emotion which create an "emotional culture" for the early childhood classroom (Gordon, 1989). From this notion, it is expected that early childhood educators teach and influence children about which emotions are acceptable in the classroom, and which emotions are acceptable and appropriate for specific types of situations. As illustrated in the introductory anecdote, Sammy's teacher tried several strategies in response to Sammy's emotional expression and behavior. This area of instruction is important because teachers play an important role in the social and emotional development of children.

Researchers are interested in the effects of the quality of care on children's emotional development. Young children who experience a lower quality of care (e.g., grouping with a large number of children, higher staff turnover rate, and teachers with lower education) experience less smiling and laughing and are more likely to use self-directed emotion regulation (Hestenes, Kontos, & Bryan, 1993; Morales & Bridges, 1996).

In a response to the need of a national accreditation system to promote high-quality children care programs, the National Association of the Education of Young Children developed the National Academy of Early Childhood Programs (NAECP). Teachers of NAECP accredited child care programs, in contrast to non-NAECP accredited child care

programs, have been shown to be more sensitive, less harsh, and less severe in their emotional interactions with children (Whitebook, Phillips, & Howes, 1989).

Several researchers (Brenner & Salovey, 1997; White & Howe, 1998) argue that early childhood teachers use similar socializing strategies as parents and that much of the maternal socialization research can be directly applied to teacher behavior; however, these assumptions have not been investigated.

The focus of this study was two-fold: to examine the socialization strategies used by early childhood educators in the regulation of young children's emotional behavior and expressions across a variety of situations and emotions, and to determine if preschool teachers differ in the emotion regulation strategies with young children in NAECP-accredited vs. non-NAECP-accredited child care programs. The following hypotheses were addressed:

- (1) Preschool teachers use a variety of strategies in response to young children's emotions.
- (2) Preschool teachers use different strategies in response to children's negative and positive emotions.
- (3) Preschool teachers differ in the emotion regulation strategies with young children in NAECP-accredited vs. non-NAECP-accredited child care programs.

CHAPTER 2: LITERATURE REVIEW

As part of the process of emotion socialization, young children learn the meaning and role emotions play in their lives through social interactions with parents, siblings, peers, and other adults. A major developmental accomplishment in the preschool years is the ability to learn how and when to control or regulate emotions. The following section will examine the meaning of emotion regulation, the development of emotion regulation strategies, and how parents and early childhood educators teach, support, and enhance young children's emotion regulation skills through the socialization process. In addition, the quality of child care will be discussed and how certain teacher characteristics may influence the choice of strategies teachers use to socialize young children's emotion regulation.

The Definition of Emotion Regulation

The construct of emotion regulation is subject to a variety of explanations and definitions (Calkins, 1994). Consensus exists among theorists that emotion regulation is an organizational component of emotion (Casey, 1994) and necessary for successful adaptation to one's environment (Campos, Campos, & Barrett, 1989). Moreover, the processes or strategies used in the management of emotional arousal are necessary for successful interpersonal function to take place (Denham, 1998; Saarni, Mumme, & Campos, 1998). In order to understand regulatory processes, both the internal and external sources of emotion regulation need to be investigated during early childhood (Calkins, 1994).

Thompson (1990, 1993, 1994) has discussed in length the development of emotion regulation in early childhood. According to Thompson (1993) emotions are a prominent feature of the everyday lives of children. In order for children to have successful interactions in their environment, both the experience and expression of emotion need to be regulated.

Although Thompson's work cannot be defined as a theory, he does satisfy the above criteria in examining the different aspects of emotion regulation. For example, Thompson (1990, 1993, 1994) has provided a working definition of emotion regulation, an explanation of preschool-age children's use of emotion regulation skills, and the role adults play in the development of emotion regulation during the preschool period. Thompson (1994) has defined emotion regulation as "the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (p. 28). Thompson (1994) has included several characteristics of the emotion regulation process in his definition of emotion regulation.

First, Thompson and Calkins (1996) have suggested that emotions are both self-regulated and managed by others. To illustrate, caregivers and other adults guide children's emotion regulation in accordance with personal beliefs and cultural expectations related to emotion. Therefore, many elements of the emotion regulation processes are socially constructed (Thompson, 1990). Parents in particular teach children cultural and family expectations of the appropriate management of emotions through modeling of the appropriate expression of emotions in different situations, direct instruction on how and when to manage emotions, and managing emotional demands placed on children (Thompson & Calkins, 1996). Second, Thompson (1990) has accredited the variation of children's reactions to emotional arousal to the emotional behaviors of emotional tone and emotional dynamics. Emotional tone is the specific emotion, or discrete emotion, that characterizes an individual's response or enduring mood. According to the differential emotion theory also known as the discrete emotions theory, children are capable of expressing a variety of discrete emotions at an early age such as joy, happiness, anger, fear, and sadness (Izard, 1991). Emotional

dynamics is the response parameters that define the quality of emotional behavior regardless of its tone, and often reflects the influence of diverse emotional regulatory processes.

Emotional dynamics are described by variations in intensity, range, liability, latency, rise time, recovery, and persistence of an emotional response (Thompson, 1990). Following this framework, Walden and Smith (1997) have suggested that emotion regulation might influence the specific emotion experience (anger vs. disgust) or emotion might be regulated through temporal and intensive features of emotion (e.g., regulation might speed or slow recovery of an emotional state or it might limit or extend the duration of emotion).

Third, Thompson (1990) has argued that emotion regulation involves strategies of emotional management needed to inhibit, maintain, or enhance emotional arousal. Strategies of emotion regulation are dictated by cultural expectation. For example, in each culture, young children must learn the expectation or values of how and under what circumstances negative emotions (e.g., anger, distress, fear) and positive emotions (e.g., joy) are expressed. In western culture, children are expected to use emotion regulation skills to inhibit negative emotions such as hitting a peer out of anger. Positive emotions are expected to be inhibited such as when a child laughs at the misfortune of another child. Children may also be expected to enhance negative emotions such as when a child intensifies his or her anger in order to stand up to a bully who is also feared. Positive emotions may also be heightened sometimes to manage negative affect such as reenacting pleasant or humorous experiences (Thompson, 1990). Therefore, one aspect of emotion regulation is to know the appropriateness of when to express the level or intensity of both negative and positive emotions.

Fourth, according to Thompson (1990), regulation emotion must be regarded

functionally, that is in terms of the regulator's goals for a particular situation. From the functionalist perspective (Campos, et al. 1989), emotions serve as a function to accomplish a person's goals and allow them to adapt to their environment (Campos, Mumme, Kermoian, & Campos, 1994; Saarni, et al. 1998). Positive emotions usually arise when the individual progresses towards a goal; negative emotion usually arises when the individual has difficulty accomplishing a goal (Brenner & Salovey, 1997). Thompson and Calkins (1996) have suggested that children use different emotion regulation strategies in different circumstances to accomplish their goals.

The Development of Emotion Regulation Strategies

Many significant developmental changes in emotional experience are related to the growth of emotional regulation (Thompson, 1990). For example, in the development of emotion regulation, emotions are initially regulated by others, but during the course of early development become increasingly self-regulated and used purposely due to neurophysiological development, the growth of cognitive and language skills, and the emergence of emotion and self-understanding (Thompson, 1990). Emotional experience becomes socialized, acquiring new meaning for the individual, and can thus be integrated into the child's growing repertoire of strategic behavioral processes (Thompson, 1990).

Regulatory processes of emotion begin to function quite early in infancy, and through interactions with parents develop into more complex mechanisms that allow children to cope with emotional arousal with the assistance of parents (Rubin et al., 1995; Saarni & Crowley, 1990). For example, the neonate has at her disposal self-soothing strategies for regulating emotional arousal such as thumb sucking. In order to understand how strategies of emotion regulation develop, researchers have focused on the effects of interpersonal events of

emotion regulation since it is more observable in young children (Walden, 1991). For example, one way that young children use interpersonal information to regulate emotion is by referring to others' reactions to events. Through social referencing, infants use others' responses to guide their own responses (Walden, 1991). Researchers commonly use the stranger situation procedure to assess emotion regulation strategies in young children since it produces mildly stressful events for the child (Mangelsdorf, Shapiro, & Marzolf, 1995; Thompson, 1990). As a result, infants tend to avoid eye contact or use gaze aversion as an emotion regulation strategy when in a mildly stressful event (Mangelsdorf et al., 1995).

Caregivers still play an important role as an external support system for toddlers and preschoolers. The support of parent and caregivers allows emotion regulation strategies to be maximally effective (Denham, 1998). By the second year of life, children are expected to rely on their own internal emotional resources to manage their affective behavior (Kopp, 1989). For example, in the toddler stage, with locomotion and cognitive advances, the toddler is capable of seeking assistance. With respect to emotion regulation strategies, toddlers attempt to direct their interaction with adults to serve as a resource in mildly stressful situation (Grolnick, Bridges, & Connell, 1996).

Language serves as a means to communicate emotions to caregivers and shapes a child's own symbolic representation of emotion and emotional experience (Thompson, 1993). By the preschool years, young children's capacity to reflect upon and talk about their feelings allows them to regulate their emotions. For example, as young children mature, they begin to be less dependent on adults to regulate their emotions and they become better able to regulate their emotions through communication and interactions with others. Through language, children use emotions to have others assist or comfort them (e.g., "That hurts!"),

talk about their emotions in order to regulate their own emotional state, and use others to change their emotional state (Dunn & Brown, 1994).

Parental Socialization of Emotions

One primary way young children learn about emotion is through parent socialization: the activities that guide, shape, and instruct children concerning culturally desirable ways of how and when to express and manage emotions that occur in social interactions (Casey & Fuller, 1994; Hyson, 1994; Strayer, 1986). In the socialization of emotional behavior, researchers have described two general modes of socialization: direct processes and indirect processes (Saarni & Crowley, 1990; Miller & Sperry, 1987).

Through direct socialization processes, parents may directly teach or coach their children about rules and regulations that govern the expression of emotion (Parke, 1994). For example, parents may directly teach young children how to feel by using didactic teaching that involves statements such as “Boys don’t cry” (Lewis & Saarni, 1995). Parents may also provide young children with verbal instructions, warnings, and commands about preferred and nonpreferred expressive behavior (Saarni, 1990; Thompson, 1990). Parental verbal instructions can include exhortations (e.g., “Will you please calm down!”), threats (e.g., “You’ll go to your room if you don’t stop crying!”), and warnings of the consequences of unregulated emotion (e.g., “You’ll get hiccups if you keep laughing so hard”). These messages not only have an immediate impact on the child’s behavior but also shape the child’s understanding of emotion (Thompson, 1990).

Through indirect socialization processes, young children learn about the appropriate displays of emotions by observations of others’ behaviors such as modeling or imitation (Eisenberg, Fabes, & Losoya, 1997). Expression of emotion is modeled by parental

emotional displays, and their particular profiles of expressed emotions may teach young children which emotions are acceptable and appropriate in specific situations and how to express them (Denham, Zoller, & Couchoud, 1994). Parents who freely express moderate levels of emotion give young children specific information about the nature of happiness, sadness, anger, and fear (Denham, 1998).

Research in the socialization of emotion regulation is new and limited. Researchers interested in the development of emotion regulation have focused on parental influences, particularly the emotion socialization practices of mothers (Denham, 1998; Saarni & Crowley, 1990) and their relationship to children's overt expression of emotions and children's social and emotional competence (Eisenberg, 1998). Three overlapping parental behaviors have been identified to influence a child's development of emotion regulation: (1) parental reactions to children's emotions (2), parental expression of emotions, and (3) parental discussion of emotions (Denham, 1998; Eisenberg, 1998).

Research has demonstrated that parental reaction to young children's emotions has an effect on children's emotional expression. Eisenberg and Fabes (1994) surveyed 79 mothers on how they would respond to their 4- to 6-year-old children's emotional expression of distress and other negative emotions (e.g., fear and sadness). Children's negative emotional behavior was also examined in the context of the preschool setting. Results indicated that mothers who reported using comforting socialization strategies in response to children's negative emotions was related to their children's ability to deal constructively with their anger by using verbal objection (e.g., defending themselves verbally) and low levels of venting (e.g., stomping their foot or crying). In a similar study, Roberts and Strayer (1987) examined 35-two parent families and their preschool-aged children to determine the impact

of parental responses to their children's distress and emotional competence. It was discovered that parents who used supportive socialization strategies, such as encouraging children's emotional expression when they were distressed, was positively related to their children's social competence in the context of the preschool classroom.

Parental expressions of emotions have been shown to influence children's expressions of emotions. Denham (1989) observed 28 toddlers and their mothers in a laboratory play session to determine how maternal emotional expressiveness affected their children's emotional expressiveness. There was a positive correlation between mothers who displayed positive emotions and their children's positive emotion displays. In addition, mothers who displayed more anger had toddlers who tended to display negative emotional expressions and relatively low levels of positive emotions. In another study, Garner (1995) examined the relationship between maternal emotional expression and emotion regulation behaviors of toddlers. Fifty-five toddlers were observed in a modified stranger situation task to determine the type of emotion regulation strategies toddlers used in a mildly distressful situation. Mothers completed a self-report measure on the frequency of family expressiveness behavior. Results showed that mothers' positive expressiveness was significantly associated with toddlers who were capable of using self-soothing behaviors when playing alone.

Parents who discuss children's emotions influence their children's emotional understanding (Denham, Cook, and Zoller, 1992; Dunn, Brown, and Beardhall, 1991). Denham et al. (1992) observed 46 preschoolers and their mothers' discussion of emotions during a laboratory visit. The mothers and their children discussed photographs of infants displaying eight emotions such as sadness, fear, and anger. In a second task, mothers stimulated anger and sadness when looking at photographs displaying the same emotions as

infants. Preschoolers' emotional labeling and emotion situational-knowledge were also assessed. Results revealed that mothers who more frequently explained the causes and consequences of emotions during the stimulation task had children who scored higher on emotion situational-knowledge such as identifying others' emotions. Furthermore, children who frequently commented about the babies' emotions during the photograph task were relatively happier in the preschool classroom. In another study, Dunn et al. (1991) studied how maternal conversation with young children was related to children's understanding of emotions. Home observations were conducted with forty-one sibling pairs and their mothers when their second child was three- years- old. Three years later the three-year-olds' perspective-taking skills were assessed. Results showed, as 6-years-olds, that children who grew up in families that frequently discussed emotions were better at identifying others' emotions than were children of families that infrequently discussed emotions.

One study has focused specifically on parental socialization strategies for emotion regulation. Parents have been found to use different socialization strategies for helping children regulate or control their emotional behavior and feelings. Casey and Fuller (1994) studied 80 mothers and their children ages 3, 4, 7, and 9 years. The type of maternal intervention was assessed by using a set of 12 emotion-provoking vignettes designed to elicit either happiness (e.g., a child receiving a desirable gift), sadness (e.g., a child falls down and hurts themselves), fear (e.g., the lights go out during a lighting storm), or anger (e.g., a child has to go to bed instead of watching a favorite television program). The findings revealed that there was less maternal regulation for anger situations than for happiness, sadness, or fear situations. Strategies for regulating emotional responses for happiness situations included mothers matching children's emotions and using brief verbal comments more often

than all other strategies. For sadness situations, mothers used comforting, discussion, and tangible aid to a similar extent and more often than the other strategies.

Before children enter the preschool setting, they have been influenced by parental strategies of emotion regulation and have access to their own emotion regulation strategies (Hyson, 1994; Katz & McClellan, 1997). With child care outside the home becoming a common experience for a majority of preschool-aged children, researchers are interested in how nonparental child care givers or teacher relationship with children influences developmental outcomes in early childhood. It is expected that the teacher-child relationship during early childhood not only influence academic achievement but also children's social and emotional development (Howes & Hamilton, 1993; Pianta, 1999).

The Influence of the Teacher Behavior on the Development of Young Children's Emotion Regulation

Traditionally, early childhood education programs have focused on the socialization of young children, including their emotions (Fogel, 1980; Hyson, 1994). Teachers of young children incorporate the rules of emotional conduct, such as how and when to express emotions, and help children regulate their emotions in the context of peer and adult interactions in their programming. Moreover, early childhood teachers act as socializing agents when they help children develop healthy patterns of emotional understanding (Denham, 1998; Hyson, 1994; Leavitt & Power, 1980; White & Howe, 1998). Pianta (1999) has argued that the way a teacher handles the management of emotion and emotional expression has an impact on the quality of the relationship she has with the children in her program. Teachers' interactions with children in their care have been shown to vary in

emotional behavior and emotional beliefs (Fees, 1998; Hyson & Lee, 1996; Leavitt & Power, 1989).

One form of emotional support and behavior researchers have investigated is the emotional bond or attachment relationship between teachers and children in the context of the preschool classroom. Howes and Hamilton (1992, 1992a, 1992b) have assessed the quality of attachment behavior between teachers and children, by using the Attachment Q-Set and observation of adult sensitivity and adult involvement. Children were found to form attachment relationships with their teachers. Moreover, secure teacher-child relationships in the classroom were associated with teacher sensitivity and high involvement when interacting with children. However, in their ethnographic study of the emotional interactions between children and out-of-home care in family day care and day cares centers, Leavitt and Power (1989) discovered that some teachers create an emotionally bland environment or failed to legitimize children's emotions through lack of acknowledgment.

Teachers hold diverse beliefs about emotions and their role in supporting children's emotional development. Hyson and Lee (1996) studied 279 American early childhood teachers' beliefs about emotions, using a self-report measure. The results showed that teachers agreed strongly that it was important to teach children socially acceptable ways of experiencing their feelings, to show affection to children, and that children learn how to express their feeling mostly by seeing how adults behave. Teachers also saw themselves as providing an important role in the emotional development of young children. In another study, Fees (1998) surveyed 30 early childhood educators' about their beliefs regarding their influence and other developmental influences (e.g., genetics, peers, siblings, and the child's own effort) on children's competencies (e.g., academic achievement, cooperation, emotion

control, and curiosity). Early childhood educators rated their influence as significantly greater in academic competence than in emotional control. Emotional control was defined as teachers helping children show their emotions appropriately, handle disappointment, and identify their emotions.

No empirical research exists on the strategies early childhood educators use to help children deal with or manage their emotions in the context of the preschool classroom. Pre-service teacher textbooks in early childhood education and writings on the topic of early emotional development provide a descriptive account about how teacher behavior can support and enhance the development of children's emotion regulation (Denham, 1998; Hyson, 1994; Kostelnik, Stein, Whiren & Soderman, 1993; Pianta, 1999). These authors recommend classroom practices that reflect parental socialization behaviors for fostering children's emotion regulation skills. For example, teacher-child relationships can facilitate children's emotion regulation through how the teachers use emotional language to discuss emotions with children, how teachers react to children's emotional behaviors, and how teachers express their own emotions in the classroom.

Teachers of young children who foster open communication of emotions in the early childhood classroom fulfill a variety of functions in supporting children's emotion regulation. Hyson (1994) has suggested that talking about emotions helps children understand the causes and consequences of emotions and expands children's vocabulary and emotional categories when their emotions are identified or labeled. Kostelnik et al. (1993) have advocated that when children receive immediate feedback about their emotional expression and behavior such as when a teacher uses affective reflection or reflective statements, children are able to link emotions with behavior. Teachers who assist children in the output or expression of

emotions help children accomplish their goals in the classroom when children are able to identify and describe their emotions to adults and peers. Children are then able to move from physical communication to verbal communication. Overall, emotional language helps children recognize situations that elicit their own emotions by anticipating the consequences of the expression of emotions and by using descriptive emotion language to regulate emotions (Hyson, 1994, Pianta, 1999).

The way early childhood teachers react to children's emotional expression and behavior can support or hinder children's emerging attempts of emotion regulation. According to Denham (1998), teachers who tolerate a wide range of children's expressed emotions positively reinforce children's emotions by accepting and acknowledging them. Also, children get a broader perspective of emotions when teachers react to or notice all types of emotions, such as matching a child's excitement or happiness instead of just acknowledging or noticing only negative or strong emotions such as anger or frustration (Kostelnik et al., 1993). For example, teachers are able to keep the intensity of emotion within acceptable limits by providing physical or verbal comfort and support (Pianta, 1999). Kostelnik et al. (1993) have suggested that before teachers intervene in children's emotional incidents, it is important to observe the context of the situation in order to gain all necessary information to make accurate judgments to assist children appropriately. When teachers work with the children's present level of behavior, they are able to help them move toward desired patterns of appropriate expression by helping them find a more appropriate way to express their emotions through problem-solving or direct instruction (Hyson, 1994).

The expression of teachers' emotions provides a model for children to follow and influences the "emotional" tone of the classroom. Sensitive and caring teachers who are

nurturing create a warm, secure emotional environment where children feel that their emotions are natural and accepted (Kostelnik et al., 1993). Hyson (1994) has argued that emotion regulation is supported in a climate where children focus on their behavior upon other people, and teachers help children see that they can change their own negative feelings or can help others feel better. Denham (1998) recommends that teachers make adjustments to their own emotional expressiveness if the situation warrants it since they serve as models of emotion regulation. Therefore, teachers are encouraged to express genuine, appropriate emotional expression in their interactions with young children (Hyson, 1994; Pianta, 1999).

In summary, teachers differ in the emotional beliefs and their emotional support and involvement with children. More research is needed on the strategies and under what circumstances teachers react to children's emotions, model emotional expression, and discuss emotions with children. Howes and Hamilton (1993) have asserted that teacher characteristics are the most important ingredient to the quality of a child care program. Teacher characteristics have been examined in relation to the overall quality of a child care program and the effects on children's social and emotional development.

Quality of Child Care Programs, Teacher Characteristics, and Young Children's Developmental Outcomes

Researchers have been interested in how variation of quality in child care affects children's cognitive, language, social, and emotional development. In the investigation of quality, four broad dimensions of quality have been identified to describe the characteristics of child care environments: contextual, global, structural, and dynamic (Phillips & Howes, 1987). Contextual features refer to the type of care setting, such as center-based care and family day care homes. Global quality refers to the measure that captures the overall early

childhood environment. The dimensions of global quality include such things as teacher-child interactions, materials, furnishings and equipment, curriculum, access to space and activities, and basic personal care provided to children.

Structural quality refers to events experienced by children that are regulated elements of early childhood classrooms like adult child ratio, group sizes, and teacher characteristics such as teacher education and professional training in early childhood education. Dynamic or process quality refers to children's experiences in care, particularly teacher implementation of developmentally appropriate or inappropriate activities and whether teacher social interactions with children are classified as positive or harsh (Aytch, Cryer, Bailey, & Selz, 1999; Howes & Smith, 1995a, 1995b; Phillips & Howes, 1987).

The majority of research on child care has focused on structural and process features of quality (White, et al. 1989). Process quality for preschool classrooms has typically been assessed by the global measure developed by Harms and Clifford (1980) called the Early Childhood Environmental Rating Scale (ECERS). The ECERS measures the day-to-day quality of care provided for children and is a 37-item scale organized under 7 categories: personal care routines, furnishings and display for children, language-reasoning experiences, fine and gross motor activities, creative activities, social development, and adult needs. Each item is scored on a 7 point scale from inadequate to excellent.

Findings from several national studies suggested that differences in quality of care have an effect on children's well-being and developmental outcomes. The National Child Care Staffing Study (NCCSS) in 1988 examined the quality of care in 227 child care centers in five metropolitan areas: Atlanta, Boston, Detroit, Phoenix, and Seattle. Quality of care was measured by using the ECERS, developmentally appropriate activities, and teacher-child

interaction based on teacher sensitivity. Findings revealed that children in lower-quality programs had higher staff turnover, and were less competent in language and social development than children in high quality centers with lower staff turnover (Whitebook et al. 1989). Similar findings were reported in The Cost, Quality, and Child Outcomes Study (1995). The Cost, Quality, and Child Outcomes Study (1995) focused on the relationship between cost and quality of care on children's developmental outcomes. Participants consisted of 228 infant/toddler classrooms and 826 preschool classrooms from the states of California, Colorado, Connecticut, and North Carolina. The quality of the children's day to day care was measured using the ECERS and the ITERS. Teacher involvement was assessed by the Caregiver Interaction Scale (Arnett, 1989), and the Teacher Involvement Scale (Howes & Stewart, 1987). Children in higher quality classrooms displayed more advanced cognitive skills in the areas of language development and pre-math skills than children in lower quality classrooms.

The quality of out-of-home care has also been shown to influence young children's emotional expression and emotional behavior (Hestenes et al, 1993; Morales & Bridges, 1996). To determine the impact on child care quality on children's emotional expression, Hestenes et al. (1993) observed 60 preschoolers interacting with their teachers during free play. Both global and process quality were assessed by using the ECERS. Process quality was also measured by observing caregivers' level of engagement with children. The results showed that children in higher-quality settings were found to display more smiling and laughing, to show a greater intensity of positive affect, and to display less intense negative affect than did children in lower-quality settings.

In another study, Morales and Bridges (1996) investigated the relationship of

nonparental care to 53 preschool-aged children's emotion regulation strategies in a mildly frustrating delay task. Children who attended child care with larger groups of children, or who had experienced many child caregiver staff turnovers, were more likely to use self-directed emotion behaviors than were children who experienced smaller groups of children and lower teacher turnover. These findings suggest that children's emotion regulation is influenced by the quality of staff characteristics such as teacher-child ratios and staff turnover.

Teachers' beliefs about emotions have been shown to be related to teacher characteristics. Hyson and Lee (1996) found teachers' diverse beliefs about emotions were also related to teacher education and professional training. For example, higher levels of education and professional training were related to teachers' belief in stronger endorsement of emotional bonds between adults and children, talking with children about emotions, and beliefs in children's ability to control their expression of emotions than teachers who have lower levels of education and professional training. Findings from Hyson and Lee (1996) support the notion that teachers who are more educated will interact differently with children with respect to their emotional development and thus emotion regulation.

In a response for the need of quality standards for out-of-home care for young children, three national early childhood accreditation/credential systems have been developed to promote program quality and worker competence beyond minimum standards (Spedding, 1993). The world's largest and most widely recognized accreditation system for early childhood programs is the National Academy of Early Childhood Programs (NAECP), a division of the National Association for the Education of Young Children (NAEYC). Since it was established in 1985, NAECP main purpose has been to improve the quality of care and

education provided for young children in group programs in the United States. The Academy has fulfilled this objective by “developing professional development resources, disseminating public information about high-quality programs, and administering a national, voluntary accreditation system for early childhood programs” (NAEYC, 1998b, p. 1).

The NAEYC’s accreditation system is designed to achieve two major goals:

- 1) “to engage early childhood program personnel in a process that will facilitate real and lasting improvements in the quality of the program serving young children, and
- 2) to evaluate the quality of the program for the purpose of accrediting those programs that substantially comply” (NAEYC, 1998b, p. 1).

Child care programs and centers receive NAECP accreditation after completing a three-step process. First, centers conduct a self-study that involves program personnel and family evaluation of how well the program meets the Academy’s standards of high quality.

The ten criteria of quality of early childhood programs that are evaluated include:

interactions among teachers and children; curriculum; teacher-parent relationships; staff qualifications and professional development; administration; staffing; physical environment; health and safety; nutrition and food services; and evaluation (NAEYC, 1998b).

One aspect of the NAECP criteria for high-quality teacher-child interactions is the enhancement of young children’s emotional development and emotion regulation. More specifically, NAECP states that evidence of high-quality interactions between teachers and children will demonstrate the following: “Teachers support children’s emotional development, assisting children to be comfortable, relaxed, happy, and involved in play and other activities. Teachers help children deal with anger, sadness, and frustration by

comforting, identifying, and reflecting feelings, and helping children use various strategies to express emotions and solve social problems. Children are encouraged to verbalize feelings and ideas. Teachers intervene quickly when children's responses to each other become aggressive, unacceptable, or harmful, teachers discuss the inappropriateness of such responses, and help children develop more positive strategies... the criterion is to be applied generally with recognition of individual differences and circumstances" (NAEYC, 1998b, p. 20).

The second step of accreditation involves an onsite visit by the Academy staff to verify the accuracy of reported program information. The third and final step is the Academy's commission, made up of early childhood experts who grant or defer accreditation. NAECP accreditation is valid for three years in which programs are dedicated to maintain program quality and professional growth and development (NAEYC, 1998b). As of 1995, more than 4,500 programs had achieved accreditation, with more than 13,000 programs involved in the self-study process (Bredekamp & Willer, 1996).

Accredited centers, in comparison to non-accredited centers, have been shown to differ in characteristics of high-quality of care and teacher-child interaction (Whitebook, 1996). For example, the NCCS Study (Whitebook et al., 1989, 1993) revealed that teachers of NAEYC-accredited centers, in comparison to non-accredited centers, had staff with higher levels of education and professional training, experienced a lower staff turnover rate, and were rated more sensitive and less harsh in their interactions with children in their care. In addition, overall quality as measured by the ECERS scores was higher in accredited than in non-accredited centers.

In summary, it is expected that teacher characteristics, specifically education, have an

effect on how early childhood educators interact with young children and how they express emotions. In addition, through the accreditation self-study process, teachers would become more aware of how they interact emotionally with children since teachers are provided with several guidelines about how to deal with the expressions and emotional reactions of young children. Furthermore, it also is expected that teachers would use different socialization strategies with young children depending on the situation and the child's emotional response.

No study was found that compared accredited and non-accredited program teachers' behavior in respect to socialization strategies teachers use in regulating children's emotions. Also, no study has investigated the practices of preschool teachers' strategies of socializing children's emotion regulation. Therefore, the purpose of the present study is to examine the socialization behaviors used by early childhood educators in NAECP-accredited and non-NAECP-accredited child care programs when regulating young children's emotions. The following research hypotheses were examined based on the literature review:

- (1) Preschool teachers use a variety of strategies with young children to socialize emotion regulation.
- (2) Preschool teachers use different strategies in response to children's negative and positive emotions.
- (3) Preschool teachers differ in the emotion regulation strategies with young children in NAECP-accredited vs. non-NAECP-accredited child care programs.

CHAPTER 3: METHODS

Participants

Forty-seven preschool teachers of 3-and 4-year-old children from community-based child care centers in Iowa participated in this study. Twenty-four of the preschool teachers were employed in NAECP accredited centers (51.1%) and 23 were employed in NAECP non-accredited programs (48.9%). The participants were all female (100%), predominately White/Caucasian (97.9%), and the majority were head/lead teachers ($N = 29$). Sixteen child care directors served the dual role of director/lead teacher. Teachers of non-accredited centers were slightly older than teachers of accredited centers ($M = 35.8$ years, $SD = 8.9$) with a mean age of 40.1 years ($SD = 11.4$). Teachers from both types of centers reported similar teaching experience with 3- to 5-year-old children (accredited, $M = 9.5$ years, $SD = 6.41$ and non-accredited, $M = 9.2$ years, $SD = 8.17$). All teachers had post-secondary education and reported at least a Childhood Development Associate Credential ($N = 4$) for both accredited and non-accredited programs. A master's degree was the highest educational degree attained by participants in both accredited (20.8%) and non-accredited centers (8.7%). The majority of teachers held a bachelor's degree for both accredited (50.0%) and non-accredited (52.2%) centers. A specialization in the area of elementary education/early childhood education was reported by the majority of teachers who held a bachelor's or master's degree in both accredited ($N = 14$, 88 %) and non-accredited programs ($N = 13$, 93%) (see Table 1).

Table 1

Demographic characteristics of preschool teachers of accredited (N = 24) and non-accredited (N = 23) child care programs

Characteristic	Accredited		Non-Accredited			
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>		
Sex						
Female	24	100	23	100		
Male	0	0	0	0		
Teaching Role						
Head/Lead Teacher	17	70.8	11	47.8		
Director/Lead Teacher	7	29.2	9	39.1		
Assistant Director/Lead Teacher	0	0	3	13.0		
Ethnic Identification						
Latino/Hispanic	0	0	1	4.3		
White/Caucasian	24	100	22	95.7		
Educational Level						
Some College	3	12.5	2	8.7		
CDA Credential	2	8.3	2	8.7		
Junior College or Equivalent	2	8.3	5	21.7		
B.A./B.S. Degree	12	50.0	12	52.2		
Elementary Education/ Early Childhood Education	10	83.0	11	91.7		
Family Studies	1	8.5	1	8.3		
Other	1	8.5	0	0		
M.A./M.S. Degree	5	20.8	2	8.7		
Elementary Education/ Early Childhood Education	4	100	2	100		
Family Studies	0	0	0	0		
Other	1	0	0	0		
	<u>M</u>	<u>SD</u>	<u>Range</u>	<u>M</u>	<u>SD</u>	<u>Range</u>
Age (Years)	35.8	8.9	22-55	40.1	11.4	23-59
Teaching Experience (Years)	9.5	6.4	1-21	9.2	8.2	1-29

Measure

Instrument Development

The Preschool Teachers' Responses to Children's Emotions (PTRCE) survey was developed by the researcher to measure the socialization strategies teachers use to regulate children's naturally occurring emotions in the preschool setting. The self-report measure included 12 randomly presented hypothetical situations that typically provoke an emotional response from a preschooler when he/she is interacting with an adult or peer (see Appendix A). Each situation represented one of the emotions of happiness, sadness, anger, and fear, with three different situations for each emotion (Casey & Fuller, 1994). The situations were adapted from prototypical events that 3-to 5-year old children cited as eliciting happiness, sadness, anger, and fear (Denham & Couchoud, 1990a, 1990b; Denham & Zoller, 1991). The situations were written to represent typical emotion-provoking situations that commonly occur in the preschool setting (Denham, 1998; Hyson, 1994; Kostelnik et al., 1993).

In response to the emotion-eliciting situations, six socialization strategies of emotion regulation were rated on how frequently the teacher would use each strategy based on a five-point Likert-type scale from 1 (Never) to 5 (Always). The identified socialization strategies for regulating children's emotions were reported by Casey and Fuller (1994) as prototypical socialization strategies used by parents and were adapted for this study to represent typical socialization strategies used by preschool teachers (see Table 2). Three of the socialization strategies presented by Casey and Fuller (1994) were not included in the PTRCE survey. It was determined that the omitted strategies (i.e., tangible aid, congratulations, and brief verbal comment) were incorporated in the six socialization strategies listed in Table 2.

Face validity of the 12 situations presented in the PTRCE survey was established by

Table 2Description of preschool teachers' socialization strategies for regulating children's emotions

Socialization Strategy	Description	Example
1. Match	Teacher expresses the same emotion as the target child.	<i>"I would say I was sad too."</i>
2. Discussion	Teacher engages the target child in a discussion about the situation.	<i>"I would talk to him/her on what to do when you're angry."</i>
3. Ignore	Teacher deliberately ignores the target child.	<i>"I would do nothing."</i>
4. Instruction	Teacher instructs the target child on how to respond to the situation.	<i>"I would tell him/her to calm himself/herself."</i>
5. Comfort	Teacher provides verbal and/or physical comfort to the target child.	<i>"I would give him/her a hug."</i>
6. Distraction	Teacher attempts to do something to take the target child's attention away from the situation.	<i>"I would get him/her to sing a song with me."</i>

Note. The socialization strategies were adapted from Casey and Fuller (1994).

10 early childhood education experts associated with a Midwestern university. Expertise in early childhood education for this study was defined as having classroom teaching experience with preschool-age children and a graduate degree in the area of early childhood education or child development. The early childhood education experts included early

childhood education faculty, graduate students, and head teachers of a Child Development Laboratory School. The early childhood education experts were mailed an information letter that explained both the purpose of the present study and requested their participation and a PTRCE survey (See Appendix C).

Items of the PTRCE survey were modified according to the suggestions and comments submitted by the experts. The changes made to the PTRCE survey included rewording two examples of the six socialization strategies and four situations for clarity such as changing “pet week” to “During a week focusing on pets.” The original four-point Likert-type scale was changed to a five-point Likert-type scale to include the choice “sometimes” and the Early Childhood Associate Credential was added to the education listing in the demographic section of the PTRCE survey.

Scoring of the Preschool Teachers’ Responses to Children’s Emotions Survey

The Preschool Teachers’ Responses to Children’s Emotions survey consisted of 72 items in which teachers rated their use of six strategies in response to children’s emotional expression of happiness, fear, anger, and sadness. The measure was divided into four subscales that consisted of 18 items for each particular emotion. Scores were calculated by averaging the teachers’ responses to each item. For example, to determine the degree of use of the six strategies, teachers’ responses to the six strategies were averaged for each of the 12 situations. In other words, each participant received a mean score for the match, discussion, ignore, instruct, comfort, and distraction strategies across all 12 situations. Next, a mean score was generated to represent the degree of use of each strategy for a particular emotion. To demonstrate, across the three situations that represented fear, a mean score was calculated for each of the six strategies used in the three fear situations. In this example, participants

received a mean score for match/fear, discuss/fear, ignore/fear, instruct/fear, comfort/fear, and distract/fear. Therefore, a mean score was calculated for each of the six strategies across the four emotions of happiness, sadness, anger, and fear, resulting in 24 mean scores of strategy use for a particular emotion for each participant. The possible range of the mean strategy score was 1 to 5. A mean score of “1” represented that the strategy was never used by the teacher, a mean score of “3” indicated that the teacher used the strategy some of the time, and a mean score of “5” represented that the strategy was used by the teacher all of the time in responding to children’s emotions.

Scale Reliability. The internal consistency (coefficient alpha) was calculated for the four subscales of happiness, fear, anger, and sadness. Eleven of the 12 ignore situation items were reverse coded due to negative scale items. The 11 ignore situation items were recoded as follows; 1 = 5 for always, 2 = 4 for usually, 3 = 3 for sometimes, 4 = 2 for seldom, and 5 = 1 for never. Scale reliability analyses indicated that the four subscales were reliable measures of teachers’ strategy use in response to children’s emotions of happiness, fear, anger, and sadness. The raw Cronbach alpha values for each subscale were .77, .80, .75, and .74, respectively.

Demographic Information and Additional Teacher Information

The Early Childhood Educator Demographic Survey was included in the PTRCE survey. Participants were asked to report demographic information regarding age, sex, racial/ethnic identification, highest level of education attained, and the number of years working with 3- to 5- year-old children. Additional information was requested at the end of the survey regarding the teachers’ preparation and their confidence level in classroom instruction involving childrens’ emotions. For instance, participants ranked their

professional preparation and their level of confidence in helping young children manage their emotions. In addition, an open-ended question asked teachers to indicate the strategies they found most helpful in teaching 3- to 5-year-old children how to deal with their emotions (see Appendix A).

Coding of Teachers' Responses to the Open-Ended Question

Coding criteria were developed to categorize the participants' open-ended responses into strategies of emotion regulation. Teachers' responses were coded according to ten strategies reported by Hyson (1994) and Kostelnik and her colleagues (1993) (see Appendix B). The ten types of strategies were: (a) *Comfort*, the teacher provided the children with verbal or physical comfort; (b) *Label*, the teacher identified or described the children's emotions; (c) *Discussion*, the teacher encouraged the children to talk about their emotions with peers and adults; (d) *Problem-Solve*, the teacher encouraged the children to problem solve disputes with peers and adults; (e) *Acknowledge/Validate*, children's emotions were acknowledged and validated by the teacher; (f) *Model*, the teacher modeled appropriate expressions of emotions; (g) *Reinforce*, the teacher praised children who expressed emotions appropriately; (h) *Diffuse*, the teacher redirected or distracted children's attention away from their emotions; (i) *Instruct*, the teacher told the children how to express their emotions appropriately and provide strategies for the children to use; (j) *Activities/Preplanning*, classroom activities were planned by the teacher to allow children to talk, write, and play about emotions. Children were allowed to express their emotions in a designated area such as a "quiet corner."

The teachers' responses were coded to determine if any of the ten strategies were reported. The ten strategies were coded as follows: 1 = reported and 2 = not reported. For

example, if a teacher stated, “*I always hug children who are sad...*” then a “1” was coded for the comfort strategy.

Analysis of Teachers’ Responses to the Open-Ended Question. The teachers’ reported strategies were presented as descriptive paragraphs or listed statements. To correctly identify and code the strategies, the teachers’ responses were transcribed into units of individual reference to a strategy. An example of a teacher’s response follows: “*Identifying the emotions they feel and talking to them about why they feel that way. How they should handle their emotions.*” The teacher’s response was transcribed into three units of individual reference to a strategy; (1) “*Identify the emotions they feel...*” (2) “*...and talking to them about why they feel that way...*” and (3) “*How they should handle their emotions.*” Forty-seven teachers’ responses were transcribed by the researcher into 131 units of individual reference to a strategy (range 1- 4).

Scoring of Strategies. Participants received one point for each reported strategy. If the same strategy was identified more than once, only one point was assigned to the category. A total score represented the total number of strategies reported. Participants were assigned a total score of “0” to “10.”

Establishment of Reliability. Two coders coded the teachers’ transcripts. The first coder was the author and the second coder was a child development doctoral student who was unaware of the hypothesis being tested. A coder manual was created, consisting of 12 practice “units of individual reference to a strategy” (see Appendix B). Coders reached agreement on whether any reference was made to the ten strategies. Discrepancies were discussed until 100% agreement was reached before actual coding began.

Interrater Reliability. The researcher coded 54 % ($N = 71$) units of individual reference to a strategy and the doctoral student coded the remaining 46 % ($N = 60$). Interrater reliability for the coding strategies was established by using percentage of agreement and Cohen's Kappa. Interrater reliability was calculated at the beginning (100% agreement, $\kappa = 1.00$) at the midpoint, (88% agreement, $\kappa = .78$), and again at the end (88% agreement, $\kappa = .76$) of the coding process.

Procedure

Directors of the 60 selected accredited and non-accredited child care centers were contacted by telephone to determine if they primarily served typically developing preschoolers. Eligible child care directors were told the purpose of the present study and they were invited to have their teachers participate. Upon verbal consent, the child care directors were asked to nominate two head teachers of 3- and 4-year-olds in their center to be contacted by the researcher.

A computerized random numbering procedure was used for the selection of the counties and community-based child care centers. Thirty NAECP-accredited centers were selected randomly from the July 1999 list of Iowa child care centers as reported on the National Association for the Education of Young Children (NAEYC) web site (NAEYC, 1999). To select the non-accredited child care centers, 30 counties were selected randomly from the 99 counties and one child care center was then selected randomly from a list of the Department of Human Services (DHS)-licensed child care centers of those 30 counties. The number of child care centers in each of the 30 counties ranged from 1 and 124.

Seventy-two child care directors were contacted by telephone and 60 directors (83%) gave verbal consent for their teachers to participate in the present study. Seven directors of

accredited child care programs ($N = 38$) declined to participate for a variety of reasons such as recent employment, personnel changes, and failure to return a signed consent form. Five directors of non-accredited centers ($N = 35$) declined to participate. Four directors did not return the initial telephone call and one director was newly employed. In two counties the directors declined to participate in the study and the other listed community-based child care centers were unreachable by telephone. These two non-accredited centers were replaced with a child care center from each of the two largest counties.

Each director was asked to nominate two lead teachers of 3- and 4-year-old children from their child care center. In some cases, only one teacher was nominated to represent a child care center. A survey was mailed to the first nominated teacher ($N = 60$) and the second nominated teacher was considered an alternate ($N = 40$). Directors were mailed an information letter, a consent form, and preaddressed postage-paid envelope to return a signed informed consent form (see Appendix C). The work address of the two nominated teachers was requested for mailing and follow-up. The first nominated teacher from each child care center was mailed a letter explaining the purpose of the study, a PTRCE survey, and a preaddressed postage paid envelope (see Appendix C). An identification number was assigned to each survey that corresponded with the name of the nominated teacher and the teacher's work address for mailing and follow up.

The follow-up procedure consisted of a three-wave mailing process to ensure a high response rate. For example, two weeks after the initial mailing, a postcard reminder was sent to non-respondents (see Appendix B). One week later, non-respondents were mailed a personal reminder letter and another copy of the PTRCE survey (See Appendix C). Participants who completed the survey received a summary letter of major empirical

findings and a complementary brochure entitled “Helping Children Learn Self-control: A Guide to Discipline” (NAEYC, 1998a).

Forty-seven teachers chose to participate in this study, resulting in a 78% return rate. Two incomplete surveys were returned to the participants to finish and one questionnaire from an accredited program was completed by the alternately nominated teacher when the first questionnaire was not completed correctly.

Data Analysis

Data analysis for this study was conducted using the Statistical Package for the Social Science (SPSS) for Windows version 8.0. The first part of the analyses calculated the frequencies and percentages of the demographic information of preschool teachers for NAECP accredited and non-NAECP accredited programs. Chi-square tests of independence were also performed. Paired t-tests were used to determine if there was a significant difference in strategy use across participants. A one-way analysis of variance (ANOVA) was conducted to determine the effect of the type of emotion elicited by the target child and the socialization strategy used by NAECP-accredited and non-NAECP accredited program.

CHAPTER 4: RESULTS

The chapter presents the study's three hypotheses and the specific analyses used to examine them. The .05 level of significance was used throughout the analyses. In addition, qualitative data are presented at the end of the chapter. Eleven of the 12 ignore situations were reverse coded in order for all items to be on the same scale for data analyses and easier interpretation of the results. Caution needs to be taken when interpreting the results since any one test may have, perhaps, a 0.95 level of confidence in all the test results simultaneously. Multiple comparisons were employed to preserve a protected 0.95 level of confidence but the set of all such tests has a lower degree of confidence. Teacher's demographic characteristics for accredited and non-accredited child care centers were examined by the Pearson chi-square test of independence and analyses of variance. No significant differences were found between teachers of accredited and non-accredited programs in age, teaching role, ethnicity, education, or years of teaching experience (see Tables D1-D5 in Appendix D).

Hypothesis 1: Preschool teachers use a variety of strategies in response to young children's emotions

Teachers' responses to the Preschool Teachers' Responses to Children's Emotions (PTRCE) survey were analyzed to determine the degree of use for each of the six socialization strategies of match, discussion, ignore, instruction, comfort, and distraction across all 12 hypothetical situations. A total mean score was calculated for each strategy. A higher mean score indicated more frequent use of the strategy in response to the children's emotions. In order of frequency, teachers reported using the discussion ($\underline{M} = 4.41$), comfort ($\underline{M} = 3.98$), instruction, ($\underline{M} = 3.45$), distraction ($\underline{M} = 3.06$), and match ($\underline{M} = 2.33$) strategies. The least used strategy reported by teachers was the ignore strategy ($\underline{M} = 1.50$) (see Table 3).

To determine whether statistically significant differences existed in teacher preferred strategy use, 15 paired independent t-test were conducted comparing total strategy mean scores across all 12 hypothetical situations. As shown in Table 4, there were statistically significant discrepancies between the means of each pair of strategies. Therefore, preschool teachers were more likely to use the discussion strategy more than other five strategies.

Table 3

Total mean scores and standard deviations of the six emotion regulation strategies reported by preschool teachers (N = 47)

Strategy	<u>M</u>	<u>SD</u>	Range
Total Discussion	4.41	0.45	3.17-5.00
Total Comfort	3.98	0.58	2.58-5.00
Total Instruction	3.45	1.00	1.08-5.00
Total Distraction	3.06	0.80	1.67-5.00
Total Match	2.33	1.09	1.00-4.83
Total Ignore	1.50	0.32	1.00-2.25

Table 4

Paired t-test results from all possible pairwise differences between preschool teachers' total mean scores on the six socialization strategies across all 12 hypothetical situations by magnitude of the t-statistic

Pairs of Strategies	<u>M</u>	t-statistic	<u>p</u>
Total Discussion Score	4.41	30.39	.000*
Total Ignore Score	1.50		

Table 4 (continued)

Total Ignore Score	1.50	-22.04	.000*
Total Comfort Score	3.98		
Total Match Score	2.33	-12.85	.000*
Total Discussion Score	4.41		
Total Ignore Score	1.50	-11.95	.000*
Total Instruction Score	3.45		
Total Ignore Score	1.50	-11.82	.000*
Total Distraction Score	3.06		
Total Discussion Score	4.41	10.48	.000*
Total Distraction Score	3.06		
Total Match Score	2.33	-10.39	.000*
Total Comfort Score	3.98		
Total Comfort Score	3.98	7.61	.000*
Total Distraction Score	3.06		
Total Discussion Score	4.41	7.34	.000*
Total Instruction Score	3.45		
Total Discussion Score	4.41	6.16	.000*
Total Comfort Score	3.98		
Total Match Score	2.33	-5.33	.000*
Total Instruction Score	3.45		
Total Mach Score	2.33	4.80	.000*
Total Ignore Score	1.50		
Total Match Score	2.33	3.75	.001*
Total Distraction Score	3.06		
Total Instruction Score	3.45	3.46	.001*
Total Comfort Score	3.98		
Total Instruction Score	3.45	2.71	.009*
Total Distraction Score	3.06		

Note. * $p < .05$. (2-tailed) $df = 45$

Hypothesis 2: Preschool teachers use different strategies in response to children's negative and positive emotions

A mean score was calculated for each of the six strategies across the positive emotion of happiness and the three negative emotions, i.e., sadness, anger, and fear, for each teacher. Paired independent t-tests were used to compare the mean scores of the six socialization strategies used in response to children's positive and negative emotions. The majority of paired independent t-tests of strategy use in response to children's positive and negative were statistically significant. In general, there seems to be differences between the use of the six socialization strategies in response to children's happiness, sadness, anger, and fear (see Tables E1-E4 in Appendix E).

As shown in Table 5, the discussion strategy was the strategy most preferred by preschool teachers in response to young children's expressions of happiness ($\underline{M} = 4.36$) and anger ($\underline{M} = 4.37$). Preschool teachers reported the comfort strategy as the most preferred strategy in response to children's sadness ($\underline{M} = 4.72$) and fear ($\underline{M} = 4.58$). The second preferred strategy reported by preschool teachers in response to children's happiness was the instruction strategy ($\underline{M} = 3.73$), compared to the discussion strategy for children's expression of sadness ($\underline{M} = 4.60$) and fear ($\underline{M} = 3.34$) and the comfort strategy in response to children's expression of anger ($\underline{M} = 3.78$). The discussion strategy was the third preferred strategy reported by preschool teachers in response to children's expression of happiness ($\underline{M} = 3.15$) whereas the instruction strategy was ranked third for sadness ($\underline{M} = 3.33$), anger ($\underline{M} = 3.52$), and fear ($\underline{M} = 3.21$). The least preferred strategy reported by preschool teachers was the ignore strategy for happiness ($\underline{M} = 1.66$), sadness ($\underline{M} = 1.13$), anger ($\underline{M} = 1.96$), and fear ($\underline{M} = 1.23$).

Table 5

Order of preference of six socialization strategies reported by preschool teachers in response to children's positive and negative emotions

Strategy	Positive Emotion	Negative Emotions		
	Happiness	Sadness	Anger	Fear
Ranked #1 <u>M</u> (SD)	Discussion 4.36 (0.57)	Comfort 4.72 (0.38)	Discussion 4.37 (0.47)	Comfort 4.58 (0.52)
Ranked #2 <u>M</u> (SD)	Instruction 3.73 (1.01)	Discussion 4.60 (0.51)	Comfort 3.78 (0.75)	Discussion 4.34 (0.57)
Ranked #3 <u>M</u> (SD)	Distraction 3.15 (0.93)	Instruction 3.33 (1.20)	Instruction 3.52 (1.01)	Instruction 3.21 (1.08)
Ranked #4 <u>M</u> (SD)	Comfort 2.85 (1.11)	Distraction 3.32 (1.06)	Distraction 3.11 (0.85)	Distraction 2.65 (1.07)
Ranked #5 <u>M</u> (SD)	Match 2.34 (1.09)	Match 2.78 (1.41)	Match 2.08 (1.10)	Match 2.12 (1.56)
Ranked #6 <u>M</u> (SD)	Ignore 1.66 (0.57)	Ignore 1.13 (0.29)	Ignore 1.96 (0.54)	Ignore 1.23 (0.33)

Hypothesis 3: Preschool teachers differ in the emotion regulation strategies used with young children in NAECP-accredited vs. non-NAECP-accredited child care programs.

A one-way ANOVA model was estimated to determine if teachers of accredited and non-accredited programs differed in the type of strategies they used in response to children's emotions. The results revealed a statistically significant difference between accredited and non-accredited programs in the use of the instruction strategy across all 12 situations, [$F(1,45) = 4.23, p < .05$] (see Table 6). Teachers in non-accredited programs more

Table 6

Analysis of variance to compare preschool teachers' use between accredited and non-accredited programs on six socialization strategies in response to 12 prototypical situations

Strategy	Accredited (n =24)		Non-Accredited (n = 23)		F (1, 45)	p
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Total Match	2.47	1.00	2.19	1.18	0.76	.389
Total Discussion	4.41	0.40	4.42	0.50	0.00	.947
Total Ignore	1.51	0.27	1.48	0.38	0.07	.890
Total Instruction	3.16	1.06	3.74	0.85	4.23	.046*
Total Comfort	4.08	0.54	3.88	0.60	1.44	.236
Total Distraction	2.91	0.79	3.21	0.80	1.58	.216

Note: *p < .05. (one-tail)

frequently reported using the instruction strategy did than teachers of accredited programs across all 12 situations.

A one-way ANOVA model was estimated to determine if preschool teachers of accredited and non-accredited programs differed in strategy use between the emotions of happiness, sadness, anger, and fear. A statistically significant difference was revealed between accredited and non-accredited programs in the teachers' use of the instruction strategy in response to children's sadness [$F(1,45) = 4.23, p < .05$], the use of the distraction strategy in response to children's expression of anger [$F(1,45) = 4.16, p < .05$], and the use of the ignore strategy in response to children's emotion of fear [$F(1, 45) = 4.28, p < .05$] (see Table 7, Table 8, Table 9, and Table 10).

Table 7

One-way analysis of variance to compare accredited and non-accredited programs in preschool teachers' use of six socialization strategies in response to children's sadness

Sadness						
Strategy	Accredited (n =24)		Non-Accredited (n = 23)		F (1, 45)	p
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Match	2.80	1.28	2.23	1.31	1.20	.279
Discussion	4.59	0.49	4.58	0.56	0.04	.829
Ignore	1.08	0.18	1.19	0.36	1.63	.208
Instruction	2.22	0.83	2.83	0.96	4.23	.046*
Comfort	4.81	0.30	4.62	0.44	3.36	.074
Distraction	3.07	1.03	3.43	1.04	1.11	.320

Note. *p < .05. (one-tail)

Table 8

One-way analysis of variance to compare accredited and non-accredited programs in preschool teachers' use of six socialization strategies in response to children's anger

Anger						
Strategy	Accredited (n =24)		Non-Accredited (n = 23)		F (1, 45)	p
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Match	2.22	1.08	1.93	1.12	0.85	.362
Discussion	4.39	0.47	4.34	0.48	0.12	.729
Ignore	1.97	0.45	1.94	0.66	3.29	.077
Instruction	3.28	1.19	3.78	0.72	3.07	.086
Comfort	3.83	0.73	3.72	0.78	0.24	.624
Distraction	2.88	0.75	3.36	0.89	4.16	.047*

Note. *p < .05. (one-tail)

Table 9

One way analysis of variance to compare accredited and non-accredited programs in preschool teachers' use of six socialization strategies in response to children's fear

Fear						
Strategy	Accredited (n =24)		Non-Accredited (n = 23)		F (1, 45)	p
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Match	2.18	1.11	2.06	1.23	0.13	.721
Discussion	4.30	0.57	4.38	0.59	0.22	.645
Ignore	1.33	0.41	1.13	0.19	4.28	.044*
Instruction	2.94	1.08	3.49	1.02	3.29	.077
Comfort	4.65	0.47	4.51	0.58	0.91	.345
Distraction	2.69	1.03	2.59	1.13	0.10	.752

Note. * $p < .05$. (one-tail)

Table 10

One way analysis of variance to compare accredited and non-accredited programs in preschool teachers' use of six socialization strategies in response to children's happiness

Happiness						
Strategy	Accredited (n =24)		Non-Accredited (n = 23)		F (1, 45)	p
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Match	2.42	0.97	2.17	1.22	0.60	.456
Discussion	4.37	0.53	4.58	0.56	0.05	.829
Ignore	1.65	0.49	1.67	0.64	0.02	.901
Instruction	3.46	1.09	4.02	0.91	3.86	.056
Comfort	2.93	1.04	2.62	1.13	1.19	.281
Distraction	2.89	0.89	3.36	0.95	3.09	.085

Note: (one-tail)

Additional Findings: Preschool teachers' academic preparation and confidence in classroom instruction regarding emotions

The teachers were asked to rank their level of academic preparation in classroom instruction concerning children's emotions using a four-point Likert range of 1 = very unprepared to 4 = very well prepared. The teachers also were asked to rank their level of and confidence in classroom instruction concerning children's emotions using a two-point Likert range of 1 = fairly confident and 2 = confident. Frequencies were calculated for these two items. Teachers reported similar levels of feeling fairly well prepared (46.8%) and feeling very well prepared (44.7%) in teaching 3-5-year-old children how to deal with their emotions. The majority of teachers (71.1%) reported feeling confident in helping children manage their emotions (see Table 11).

Table 11

Frequency and percentages of preschool teacher reports of their academic preparation and confidence in classroom instruction regarding children's emotions

Item	Frequency	Percentage
Academic Preparation (N = 47)		
Very Unprepared	1	2
Fairly Unprepared	2	4
Fairly Well Prepared	22	47
Fairly Well Prepared/Very Well Prepared	1	2
Very Well Prepared	21	45
Confidence (N = 46)		
Fairly Confident	13	28
Confident	33	72

The chi-square test of independence was used to compare the preschool teachers in accredited and non-accredited programs in their level of preparation and confidence in classroom instruction involving children's emotions. There were no statistically significant differences between preschool teachers of accredited and non-accredited centers in reporting their level of academic preparation and their feeling of confidence in teaching young children how to deal with their emotions (see Table 12 and Table 13).

Table 12

Differences between accredited and non-accredited programs in the frequency and percentages of preschool teacher reports of their academic preparation in classroom instruction regarding children's emotions

Item	Accredited (n = 24) Frequency (%)	Non-Accredited (n = 23) Frequency (%)
Preparation		
Very Unprepared	0 (0)	1 (4.3)
Fairly Unprepared	2 (8.3)	0 (0)
Fairly Well Prepared	12 (50.0)	10 (43.5)
Fairly Well Prepared/Very Well Prepared	0 (0)	1 (4.3)
Very Well Prepared	10 (41.7)	11 (47.8)

Note. $\chi^2 = 4.21$. $p = .38$. $df = 4$

Additional Findings: Preschool teachers' responses to open-ended question on the preschool teachers' responses to children's emotions (PTRCE) survey

Forty-six teachers (98%) completed the open-ended question that requested information about the strategies they found most helpful in teaching 3-to 5-year-old children how to deal with their emotions. The mean number of total strategies reported by the participants was 4.30 (SD = 1.63, range 2-6). The most common strategies teachers

Table 13

Differences between accredited and non-accredited programs in the frequency and percentages of preschool teacher reports of their feelings of confidence in classroom instruction regarding children's emotions

Item	Accredited (n = 23) Frequency (%)	Non-Accredited (n = 23) Frequency (%)
Confidence		
Fairly Confident	5 (21.7)	8 (34.8)
Confident	18 (78.3)	15 (65.2)

Note. $\chi^2 = 0.97$. $p = .33$. $df = 1$

reported were the acknowledge/validate ($N = 31$, 67.4%), discussion ($N = 31$, 67.4%), and instruction strategies ($N = 30$, 65.2%). The least common strategies reported by teachers were the diffuse ($N = 7$, 15.2%), reinforcement ($N = 11$, 23.9%), and activities/preplanning strategies ($N = 12$, 26.1%) (see Table 14).

A one-way ANOVA model was estimated to determine if there was a difference in the total number of strategies reported by preschool teachers of accredited and non-accredited programs on the open-ended question of the PTRCE survey. Results indicated that preschool teachers of accredited programs reported significantly more strategies in helping young children deal with their emotions than did teachers of non-accredited programs [$F(1, 44) = 5.14$, $p < .05$] (see Table 15).

Ten chi-square tests of independence were used to examine the frequency of the type of strategy reported by teachers to the open-ended question on the PTRCE survey between accredited and non-accredited programs. The results showed there was a statistically significant difference ($p < .05$) between teachers of accredited and non-accredited programs

Table 14

Frequency of preschool teacher reported strategies for teaching children emotion regulation (N = 46)

Strategy	Frequency (%)	Example of Teacher Responses
1. Discussion	31 (67.4)	<i>"Talk with them [children] and discuss different feelings people have and how to express them."</i>
2. Acknowledge/Validate	31 (67.4)	<i>"I sympathize with emotions to allow the children to know that I understand their feelings."</i>
3. Instruction	30 (65.2)	<i>"Showing them [children] how to express their feelings."</i>
4. Label	22 (47.8)	<i>"We work a lot with identifying and verbalizing their [children's] emotions..."</i>
5. Model	21 (45.7)	<i>"Model feelings with co-workers as an example for preschoolers."</i>
6. Problem Solve	20 (43.5)	<i>"...children at 3-5 are at a great age for the introduction of conflict resolution and guiding them through it..."</i>
7. Comfort	16 (34.8)	<i>"Physical communication (e.g., hugs, holding hands)."</i>
8. Reinforcement	11 (23.9)	<i>"...point out the positive things they do for one another."</i>
9. Activities/Preplanning	12 (26.1)	<i>"...reading good stories about feelings..."</i>
10. Diffuse	7 (15.2)	<i>"I redirect the children often when they are upset or starting to get into conflict."</i>

Note: Teacher strategies adopted from Hyson (1994) and Kostelnik, Stein, Whiren, and Soderman (1993).

Table 15

Differences between accredited and non-accredited programs in the total number of reported strategies by preschool teachers to an open-ended question

Item	Accredited (n = 23)			Non-Accredited (n = 23)			F (1, 44)	p
	<u>M</u>	<u>SD</u>	Range	<u>M</u>	<u>SD</u>	Range		
Total Strategies	4.83	1.64	2-8	3.78	1.48	2-7	5.14	.03*

Note. *p < .05.

who reported using the discussion strategy ($\chi^2 = 8.01$, $df = 1$, $p = .01$). Eighty-seven percent of preschool teachers of accredited child care programs reported using the discussion strategy in teaching children how to deal with their emotions, compared to 47.8% of preschool teachers of non-accredited child care programs (see Table 16).

Table 16

Frequency of preschool teachers' reported strategies for teaching children emotion regulation by program

	Accredited (n = 23)	Non-Accredited (n =23)		
Strategy	Frequency (%)	Frequency (%)	χ^2	P-Value
Comfort	9 (39.1)	7 (30.4)	0.4	.54
Acknowledge/Validate	17 (73.9)	14 (60.9)	0.9	.35
Discussion	20 (87.0)	11 (47.8)	8.0	.01*
Problem Solve	12 (52.2)	8 (34.8)	1.4	.23
Label	13 (56.5)	9 (39.1)	1.4	.24
Model	12 (52.2)	9 (39.1)	0.5	.50
Reinforcement	5 (21.7)	6 (26.1)	0.1	.73
Diffuse	2 (8.7)	5 (21.7)	1.52	.22
Instruction	17 (73.9)	13 (56.5)	1.53	.22
Activities/Preplanning	5 (21.7)	7 (30.4)	0.45	.50

Note. *p < .05.

CHAPTER 5: DISCUSSION

The present study was designed to gain a better understanding of the socialization strategies early childhood educators use to manage or deal with young children's emotional behavior and expressions across a variety of situations and emotions. Specifically, the goals of the study were to determine the type and frequency of the socialization strategies preschool teachers used to regulate young children's emotions in the preschool setting and if the strategies preschool teachers use were related to the type of emotion young children expressed. An additional purpose of the study was to determine if preschool teachers differed in emotion regulation strategies used with young children in NAECP accredited vs. non-NAECP accredited child care programs.

There were no statistically significant differences between preschool teachers of accredited and non-accredited child care centers in demographic characteristics such as age, ethnicity, education, years of teaching experience, and teaching role. Of particular interest is the lack of educational difference between the two groups of preschool teachers. In contrast, the National Child Care Study (Whitebook et al., 1989, 1993) found that teachers of NAEYC accredited centers in comparison to non-accredited centers had staff with higher levels of education. One possible explanation for this difference is that teachers of the present study were recruited from rural Iowa in comparison to teachers in the National Child Care Study that represented urban areas. Future research would be beneficial in comparing early childhood educators' demographic characteristics such as level of education from rural and urban samples. Another possibility is that Iowa child care providers employ better-educated preschool teachers. Tu (1997) found no statistically significant differences on educational level between Iowa teachers of accredited and non-accredited child care centers in a study

that examined preschool teachers' beliefs and practices of science instruction.

The first hypothesis predicts that preschool teachers would use a variety of strategies in response to children's emotions. Two sources of information support this hypothesis: the PTRCE survey and the information collected from the open-ended question that asked teachers to report the most helpful strategies they used to teach 3- to 5-year-old children how to deal with their emotions. The analysis of the total mean scores of the teacher's responses to the PTRCE survey shows that teachers reported using all six socialization strategies to some degree in response to children's emotions. Furthermore, in response to the open-ended question preschool teachers reported an average of four strategies they found most helpful in teaching young children emotion regulation skills.

The discussion strategy was one of the most frequently reported strategies chosen by preschool teachers in both the PTRCE survey and the open-ended question. Teacher responses to the open-ended questions illustrate how teachers applied the discussion strategy in the classroom. Teachers commonly reported using the discussion strategy to, "...explain how children may feel in different situations," "...discussing alternatives to deal with feelings," and "...helping a child communicate their feelings." These findings suggest that preschool teachers use open communication to identify children's emotions, talk to children about the causes of their own and others' emotions, and provide children with the opportunity to explain their feelings to peers. As recommended by Hyson (1994), Kostelnik et al. (1993), and Pianta (1999), preschool teachers use discussion to increase young children's understanding of emotions and teach children how to use emotional language to support their regulation of emotions.

The comfort strategy was another strategy most often reported by preschool teachers

across the 12 hypothetical situations presented in the PTRCE survey. The acknowledge/validate strategy, a form of verbal comfort, was also one of the top strategies teachers included in their answers to the open-ended question. Teachers generally reported using the acknowledge/validate strategy as a way to sympathize or empathize with children's emotions and to reinforce the understanding that children's emotions were a natural occurrence. The acknowledge/validate strategy was also used by teachers to teach children how to express their emotions within appropriate guidelines. One teacher illustrated this strategy in her written comments, "I tell them [children] it's okay to have this feeling, however there are many ways to express this feeling (I go into examples), "which one do you think would be the best?" Another teacher reported telling children, "It's okay to be angry, but it's not okay to hurt." These findings reveal that teachers react positively to young children's emotions by being sensitive and supportive. In addition, these findings provide support to Thompson and Calkins' (1996) argument that teachers guide young children's emotion regulation according to cultural expectations related to emotions by teaching children social desirable ways of expressing their emotions.

Preschool teachers also frequently reported the instruction strategy in response to the PTRCE survey and in response to the open-ended question. The instruction strategy was generally used by preschool teachers to, "...give children a better way to deal with their emotion," and "...how they [children] should handle their emotions." By using the instruction strategy, preschool teachers seem to use children's emotional experiences as a teaching opportunity to provide children with feedback and strategies on socially acceptable ways to manage their behavior and express their emotions (Hyson, 1994).

Results from the PTRCE survey and open-ended question reveal that teachers

reported similar emotion regulation strategies. It can be argued that the respondents used the strategies of the PTRCE survey to represent their own choice of strategies for the open-ended question. However, teachers did report seven different strategies in their response to the open-ended question that were not presented in the PTRCE survey. These additional strategies provide more information on the type of strategies that teachers are using to regulate children's emotions in the preschool setting. Of the seven strategies, the most commonly reported strategies were labeling, modeling, and problem solving. Of these additional strategies, preschool teachers most often reported using the label strategy to help children communicate their feelings to others. This suggests that preschool teachers provide children with emotional labels and encourage children to express verbally how they feel. Preschool teachers commonly used the model strategy as an opportunity to teach children how to express their emotions appropriately. The use of the model strategy indicates that preschool teachers are aware of their influence in showing children how to deal with their emotions by the way they express and handle their own emotions in the classroom. Teachers also reported using problem solving to help children resolve their emotional needs. It appears that preschool teachers value teaching children independence by learning how to solve problems on their own.

Overall, these findings support Thompson and Calkins' (1996) argument that caregivers and teachers act as an external support system for young children and that they influence the development of emotion regulation through direct socialization processes (i.e., direct instruction, verbal and physical comfort, and open communication). Furthermore, as White and Howe (1998) have suggested, preschool teachers and parents appear to use similar socialization strategies for teaching young children emotion regulation skills, such as

discussion, positive reactions, and modeling. Future research is needed to compare the socialization practices of teachers and parents. The PTRCE survey's 12 situations could be adapted for future empirical use with parents.

The second hypothesis that preschool teachers use different strategies in response to children's negative and positive emotions is partially supported. In response to children's display of happiness, preschool teachers reported using the discussion and instruction strategies more frequently than the four other strategies. This finding does not support the work Casey and Fuller (1994) on maternal regulation of children's emotions, where mothers reported matching their children's happiness and using brief verbal comments most often in response to their children's expression of happiness. One possible explanation for this difference between mothers and teachers may be that teachers are concerned about how the timing of the expression of children's happiness affects other children. To illustrate, the happiness situations in the PTRCE survey occurred during a program transition in which one child was rolling and laughing in the grass instead of forming a line at the classroom door. The two other happiness situations involved children displaying happiness that teachers might believe is socially inappropriate. For example, one child showed happiness by physically clinging to a friend and another child displayed happiness after receiving a birthday invitation. It appears that preschool teachers teach young children when to inhibit the positive emotion of happiness by discussing the happiness situation with the children and instructing them which circumstances are appropriate for expressing their happiness (Thompson, 1990).

Preschool teachers reported using both the comfort and discussion strategies most often in response to children's negative emotions of sadness and fear. These findings reveal

that preschool teachers are responding appropriately to children's fear and sadness as discussed by Hyson (1994), Kostelnik et al. (1993), and Pianta (1999). For example, the choice of comforting children's sadness and fear indicates that teachers are sensitive and responsive to young children's emotional states and they help regulate the intensity level of children's emotions by providing physical and/or verbal comfort. In addition, talking to children about the causes of their sadness and fears seems to be a way for teachers to help children cope with their sadness and fears and learn more constructive ways to deal with these emotions.

In response to children's expression of anger, preschool teachers reported using discussion as the most preferred strategy, followed by the comfort strategy. It may be that teachers are concerned with putting children's anger into perspective by talking about the causes of the children's anger. Teachers' selection of the comfort strategy in response to children's anger is similar to previous research that found that mothers respond to their children's anger by using comfort (Eisenberg & Fabes, 1994).

The third hypothesis predicted that preschool teachers of accredited and non-accredited centers would use different socialization strategies in response to children's emotions. This hypothesis is partially supported. Analysis of the type of socialization strategy used in response to positive and negative emotions by preschool teachers of accredited and non-accredited child care programs revealed several differences. First, teachers of non-accredited centers reported using the distraction strategy more often than teachers of accredited centers in response to children's anger. In other words, the teachers of non-accredited programs reported distracting children's anger "sometimes to usually," compared to teachers of accredited programs who reported using the distraction strategy "seldom to

sometimes.” This finding is a cause for concern since teachers of non-accredited programs may be responding inappropriately to children’s anger by choosing not to help or teach children ways to deal constructively with their anger (Kostelnik et al., 1993).

Second, teachers of non-accredited programs reported using the instruction strategy across all 12 situations more often than did teachers of accredited programs. In addition, the instruction strategy was reported more by teachers of non-accredited programs in response to children’s sadness compared to teachers of accredited programs. Teachers of accredited programs reported using the ignore strategy in response to children’s expression of fear more than did teachers of non-accredited programs. Caution must be taken when interpreting these results. Although statistically significant differences were found between each of the three comparisons, the mean scores in all three cases represent similar categories of strategy use. For example, in the comparison of preschool teachers of accredited and non-accredited programs’ use of the instruction strategy across 12 hypothetical situations, the mean score indicates that teachers of both programs reported using the instruction strategy “sometimes to usually.” These findings are difficult to interpret and require future research with a larger sample.

Preschool teachers of both accredited and non-accredited programs varied between and within each group in the way they would respond to children’s emotions. The most frequently reported strategies by teachers of accredited and non-accredited programs were the common strategies of discussion, instruction, and comfort. This shows that preschool teachers across both types of programs are using similar strategies that promote high-quality teacher-child interactions in respect to children’s emotional development as advocated by the National Academy of Early Childhood Programs (NAEYC, 1998b).

Another interesting finding was that teachers across both programs were unlikely to match children's emotions. Perhaps the definition and illustration of its use in the PTRCE survey were ambiguous to teachers. Teachers may have interpreted match to mean actually feeling the child's emotions rather than mimicking or emulating her emotions.

The most important finding is that teachers from both programs report infrequently ignoring children's emotions. This finding implies that teachers are reporting positive practices in being responsive and attentive to children's emotional displays, thus creating a secure emotional climate in the classroom for the children in their care (Howes & Hamilton 1992a, 1992b).

The additional teacher information obtained from the PTRCE survey provides insight as to how teachers regard their academic preparation and level of confidence in classroom instruction involving children's emotions. Teachers ranked their level of academic preparation to teach children emotional management as being fairly well prepared and very well prepared. Furthermore, teachers reported being confident in their classroom instruction involving children's emotions. These findings reveal that preschool teachers, from their perspective, are receiving sufficient pre-service teacher preparation concerning implementation of strategies involving children's emotions in the classroom. Preschool teachers' high level of classroom preparation and confidence may be due to their educational background since the majority of teachers held a bachelor's degree with a specialization in early childhood education and/or elementary education. In this case, teachers' coursework and training may have provided teachers with an array of strategies they could choose from to respond appropriately to children's emotions.

Future research is needed to gain a better understanding of the multiple variables that

may influence how early childhood teachers respond to children's expression of emotions. It seems plausible that a teacher's own emotional expressiveness and emotional beliefs would be contributing factors on the circumstances under which teachers would discuss, react to, and model emotions with young children. In addition, research is needed to examine whether preschool teachers are influenced by the sex of the child in the socialization of how and under what circumstance children should regulate their emotions. Finally, the present study examined a limited number of emotions that young children experience daily. Future research is necessary to examine other emotions such as joy, excitement, guilt, pride, and shame along with children's mixed emotions since regulation of these particular emotions also contributes to young children's social and emotional competence.

CHAPTER 6: SUMMARY AND IMPLICATIONS

In summary, the present study examined the reported socialization strategies preschool teachers of 3- and 4-year-olds use to regulate young children's emotions in the preschool setting. Forty-seven preschool teachers completed the PTRCE survey that examined the type and frequency of socialization strategies teachers used in response to children's positive emotions of happiness and negative emotions of sadness, fear, and anger.

Major findings reveal that the preschool teachers' most preferred choice of socialization strategies indicates that they are using appropriate socialization strategies in the promotion and support of young children's development of emotion regulation skills. To illustrate, teachers reported responding to children's emotions by using a variety of strategies such as discussion, comfort, and instruction. More specifically, teachers indicated using physical and/or verbal comfort as their initial reaction to children's displays of fear and sadness followed by talking over the causes of these emotions. In situations that involved children showing happiness, teachers were more likely to talk over the situation with children and then provide instruction of appropriate ways to express their happiness. Teachers generally reported talking to children about their anger and providing them with comfort. For situations that involved children's happiness, sadness, fear, and anger, teachers were less likely to ignore or match children's display of these four emotions. In addition, there also appeared to be few differences between the types of strategies that these well-educated preschool teachers of accredited and non-accredited programs used to regulate children's emotions. The teachers' level of confidence related to teaching children emotion regulation skills in the classroom were similar in both types of programs.

This study has several limitations. The first limitation is the small sample of

participants that makes it difficult to generalize the findings to the population of early childhood educators. Future research is necessary with a larger group of participants. The second limitation is the selection process of the participants. For example, child care directors were asked to nominate two teachers to represent their child care centers. It is possible that directors selected the “best candidate” who may not have represented all staff members of the particular child care center. More director/lead teachers were included in this study than reported in similar studies. This may have biased the self-report to make the center appear better. The third limitation is the use of a self-report measure. Participant’s responses may be influenced by social desirability and they may not reflect actual practice in the classroom. Multiple data collection methods are needed in future research that includes naturalistic observations of teacher-child interactions that are accompanied by self-report measures to obtain a more accurate representation of preschool teachers’ socialization strategies used in response to children’s emotions.

Despite these limitations, this is the first known study to provide preliminary documentation of preschool teachers’ socialization strategies in response to children’s emotional expressions and emotional behaviors. Moreover, this study was the first to compare the socialization behavior used by preschool teachers in centers accredited by the National Academy of Early Childhood Programs (NAECP) and non-NAECP accredited child care programs when regulating young children’s emotions. The findings from this study support the importance of the examination of the possible impact of early childhood educators in the socialization of young children’s emotions and emotion regulation.

APPENDIX A:
PRESCHOOL TEACHERS' RESPONSES
TO CHILDREN'S EMOTIONS
SURVEY

A Survey of
Preschool Teachers' Response
to
Children's Emotions

*The purpose of this study is to learn how preschool teachers
help four-year-olds deal with their emotions.*



Mona D. Berkey & Joan E. Herwig
Human Development and Family Studies
Iowa State University

Preschool Teachers' Responses to Children's Emotions Survey

Instructions: Imagine yourself observing the following situations while working in a preschool classroom as a head teacher of **typically developing four-year-olds**. After you read each situation, please circle the number that indicates how often you would use **each** of the six responses with the **target child**. The choices of six responses are listed below with an example of how a teacher might use each response. It is important that you rate all the responses for each situation even if you are unsure of your answer. All answers to the situations will be kept anonymous and only group data will be reported.

Teacher Responses to Target Child

Response A: Match Emotion ("I would say I was sad, too").

Response B: Discussion ("I would talk with her/him on what to do when you're angry").

Response C: Ignore ("I would do nothing").

Response D: Instruction ("I would tell him/her to calm himself/herself").

Response E: Comfort ("I would give her/him a hug").

Response F: Distraction ("I would get him/her to sing a song with me").

(Adapted from Casey & Fuller, 1994).

Situation 1					
<p>Child A is washing his/her hands for snack time. Child A finds a small toy dinosaur by the sink and begins to play with it. As snack time begins, you ask Child A to put the toy dinosaur away in the block area before eating his/her snack. Child A moans in protest while stomping loudly to the block area.</p>					
Please circle the number that indicates how often you would use each response with Child A .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child A .	1	2	3	4	5
B. I would talk to Child A about the situation.	1	2	3	4	5
C. I would ignore Child A .	1	2	3	4	5
D. I would tell Child A how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child A .	1	2	3	4	5
F. I would distract Child A's attention away from the situation.	1	2	3	4	5

Situation 2

During a week of focusing on pets, one child brings her large dog to the classroom for a visit. When the dog approaches **Child B**, who is sitting next to you, **Child B** scoots closer to you and clings to your arm with a fearful look on her/his face.

Please circle the number that indicates how often you would use each response with Child B .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child B .	1	2	3	4	5
B. I would talk to Child B about the situation.	1	2	3	4	5
C. I would ignore Child B .	1	2	3	4	5
D. I would tell Child B how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child B .	1	2	3	4	5
F. I would distract Child B's attention away from the situation.	1	2	3	4	5

Situation 3

During the circus week theme, a clown visits the classroom and begins passing out 14 balloons to the 16 children. The clown runs out of balloons before getting to **Child C**. **Child C** begins to cry.

Please circle the number that indicates how often you would use each response with Child C .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child C .	1	2	3	4	5
B. I would talk with Child C about the situation.	1	2	3	4	5
C. I would ignore Child C .	1	2	3	4	5
D. I would tell Child C how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child C .	1	2	3	4	5
F. I would distract Child C's attention away from the situation.	1	2	3	4	5

Situation 4

Child D and another child are rolling down a hill on the playground. When you announce that it is time to go indoors, both children are rolling in the grass and laughing loudly. The other child gets up and darts to the classroom door to line up. **Child D** continues rolling on the grass and happily laughing.

Please circle the number that indicates how often you would use each response with Child D .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child D .	1	2	3	4	5
B. I would talk with Child D about the situation.	1	2	3	4	5
C. I would ignore Child D .	1	2	3	4	5
D. I would tell Child D how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child D .	1	2	3	4	5
F. I would distract Child D's attention away from the situation.	1	2	3	4	5

Situation 5

Two children are sitting on a tire swing. One child asks you to push them. As the swing spins faster, **Child E's** eyes widen in alarm, his/her fingers tightly grip the chain on the swing. **Child E** then yells "Off, I want off!"

Please circle the number that indicates how often you would use each response with Child E .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child E .	1	2	3	4	5
B. I would talk with Child E about the situation.	1	2	3	4	5
C. I would ignore Child E .	1	2	3	4	5
D. I would tell Child E how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child E .	1	2	3	4	5
F. I would distract Child E's attention away from the situation.	1	2	3	4	5

Situation 6

Child F rapidly peddles a tricycle along a curved road painted on the sidewalk. The tricycle tips over and **Child F** tumbles onto the sidewalk. **Child F** rolls onto her/his back, howling and holding her/his scraped elbow.

Please circle the number that indicates how often you would use each response with Child F .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child F .	1	2	3	4	5
B. I would talk with Child F about the situation.	1	2	3	4	5
C. I would ignore Child F .	1	2	3	4	5
D. I would tell Child F how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child F .	1	2	3	4	5
F. I would distract Child F's attention away from the situation.	1	2	3	4	5

Situation 7

On Monday morning **Child G** is standing by the classroom door waiting for the arrival of his/her best friend. When **Child G** sees his/her friend, he/she squeals in delight and tightly hugs his/her friend. When the best friend attempts to break out of the hug, **Child G** squeezes the friend tighter.

Please circle the number that indicates how often you would use each response with Child G .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child G .	1	2	3	4	5
B. I would talk with Child G about the situation.	1	2	3	4	5
C. I would ignore Child G .	1	2	3	4	5
D. I would tell Child G how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child G .	1	2	3	4	5
F. I would distract Child G's attention away from the situation.	1	2	3	4	5

Situation 8

Child H receives a birthday invitation from a classmate and asks you to read it to him/her. After you read the invitation, **Child H** grins broadly at you and then dashes about in the classroom, shouting in excitement, "I'm going to a birthday party! I'm going to a birthday party!"

Please circle the number that indicates how often you would use each response with Child H .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child H .	1	2	3	4	5
B. I would talk with Child H in a discussion about the situation.	1	2	3	4	5
C. I would ignore Child H .	1	2	3	4	5
D. I would tell Child H how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child H .	1	2	3	4	5
F. I would distract Child H's attention away from the situation.	1	2	3	4	5

Situation 9

Child J sits by another child at story time. The other child tells **Child J**, "Go away, you're not my friend."
Child J hangs her/his head, her/his shoulders drop and he/she begins to sob.

Please circle the number that indicates how often you would use each response with Child J .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child J .	1	2	3	4	5
B. I would talk with Child J about the situation.	1	2	3	4	5
C. I would ignore Child J .	1	2	3	4	5
D. I would tell Child J how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child J .	1	2	3	4	5
F. I would distract Child J's attention away from the situation.	1	2	3	4	5

Situation 10

During large group, you ask **Child K** a question about his/her recent family camping trip. **Child K** looks uneasily at the other children, then places his/her fingers in his/her mouth and just stares at the floor, not saying a word.

Please circle the number that indicates how often you would use each response with Child K .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child K .	1	2	3	4	5
B. I would talk with Child K about the situation.	1	2	3	4	5
C. I would ignore Child K .	1	2	3	4	5
D. I would tell Child K how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child K .	1	2	3	4	5
F. I would distract Child K's attention away from the situation.	1	2	3	4	5

Situation 11

Child L has spent most of free choice building an elaborate castle at the block center. Another child accidentally knocks the block castle over as she/he walks by. **Child L** fists tighten and he/she furiously screams at the other child, "You broke my castle!"

Please circle the number that indicates how often you would use each response with Child L .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion Child L .	1	2	3	4	5
B. I would talk with Child L about the situation.	1	2	3	4	5
C. I would ignore Child L .	1	2	3	4	5
D. I would tell Child L how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child L .	1	2	3	4	5
F. I would distract Child L's attention away from the situation.	1	2	3	4	5

Situation 12

Child M and another child are taking turns playing a game on the computer. From across the classroom, you hear the other child chanting to **Child M**, "You are a baby, You are a baby." **Child M** jumps up from her/his chair, glares at the other child and screams in protest, "No I'm not!"

Please circle the number that indicates how often you would use each response with Child M .	Never	Seldom	Sometimes	Usually	Always
A. I would express the same emotion as Child M .	1	2	3	4	5
B. I would talk with Child M about the situation.	1	2	3	4	5
C. I would ignore Child M .	1	2	3	4	5
D. I would tell Child M how to respond to the situation.	1	2	3	4	5
E. I would provide verbal and/or physical comfort to Child M .	1	2	3	4	5
F. I would distract Child M's attention away from the situation.	1	2	3	4	5

Please turn to page 8

Early Childhood Educator Demographic Survey

1. How many children are currently enrolled in your program? _____
2. What is the title of your role? (Circle one response)
 - 1 = Head Teacher/Lead Teacher
 - 2 = Director & Head Teacher/Lead Teacher
 - 3 = Teacher Assistant/Teacher Associate
 - 4 = Other (please specify) _____
3. What are the total number of years you have taught in either preschool or kindergarten? (including this year) _____
4. What is the highest educational level you have completed? (Circle one response)
 - 1 = Some High School
 - 2 = High School Diploma
 - 3 = CDA Certification
 - 4 = Some College
 - 5 = Junior College or Equivalent
 - 6 = B.A./B.S. Degree
 - 7 = M.A./M.S. Degree
 - 8 = Other (please specify) _____

Please specify your major/specialization _____

5. What is your sex? (Circle one response)
 - 1 = Male
 - 2 = Female
6. What is your present age? _____

Please turn to page 9

7. What is your racial or ethnic identification? (Circle all that apply).

1 = Asian or Pacific Islander

2 = Native American/American Indian

3 = Black/African American

4 = Latino(a)/Hispanic

5 = White/Caucasian

6 = Other (please specify) _____

8. How adequate do you feel **you have been prepared** in helping children ages 3-5 years deal with their emotions? (Circle one response)

1 = Very Unprepared

2 = Fairly Unprepared

3 = Fairly Well Prepared

4 = Very Well Prepared

9. How **confident do you feel** in helping children ages 3-5 years deal with their emotions? (Circle one response)

1 = Confident

2 = Fairly Confident

3 = Confident

10. From own professional experience as a teacher, **what strategies have you found most helpful** in teaching children ages 3-5 years deal with their emotions?

Please turn to page 10



Thank you for generously sharing your time and expertise with us in completing the PTRCE survey. Your answers to the questions will help us gain a better understanding of how preschool teachers help young children deal with their emotions.

Please insert the completed survey in the enclosed preaddressed postage paid envelope and **mail within five days.**

In great appreciation,

Mona D. Berkey
Graduate Student

Joan E. Herwig, Ph.D.
Major Professor
in Charge of Research



APPENDIX B:
CODING CRITERIA FOR PRESCHOOL TEACHERS'
REPORTED STRATEGIES FOR TEACHING EMOTION REGULATION

Coding Criteria for Preschool Teachers' Reported Strategies for Teaching Emotion Regulation

The basis for coding teacher responses is to determine the type of strategies teachers found most helpful in teaching 3- to 5-year-old children how to deal with their emotions. The following ten categories will be used to code teacher responses:

1. **Comfort** The teacher provides physical comfort such as hugging or holding hands with children and provides verbal comfort such as saying encouraging words such as "I'm sorry you feel sad."
2. **Acknowledge/
Validate** The teacher accepts children's emotions, allows or encourages children to express their emotions.
3. **Discussion** The teacher encourages children to talk about their emotions with their peers and adults. The teacher talks with children about the causes of emotions, tries to understand why they may feel a certain way, and how they can communicate or express their emotions appropriately.
4. **Problem Solve** The teacher is supportive in having children work out problems with peers and adults. The teacher prompts children to talk about their emotions and to find different ways of dealing appropriately with their emotions.
5. **Label** The teacher identifies and/or describes the emotions that children are experiencing/feeling. Children are encouraged to use words to label or identify their emotions. The teacher use "I" messages or statements about children's emotions such as "I can see that you are mad."
6. **Model** The teacher models how to express emotions, when to express emotions, and how emotions are controlled or managed. "Teachable moments" are used by the teacher to show children how to appropriately express/communicate their emotions.
7. **Instruct** The teacher instructs or tells children how to express their emotions appropriately. The teacher teaches a child a specific skill on how to express their emotions.
8. **Reinforce** The teacher praises children who express their emotions appropriately.
9. **Diffuse** The teacher redirects or distracts children's attention away from their emotions.
10. **Activities/
Preplanning** The teacher prepares the classroom curriculum to allow children to talk, write, and play about emotions. The physical setting is arranged in order to allow children to express their emotions such as in a "quiet corner."

Strategies adopted from Hyson (1994) and Kostelnik, Stein, Whiren, & Soderman (1993).

Coder 1 or 2

Research ID #

Coding Sheet

Teacher Transcribed Statement(s)									
Comfort	Acknowledge/ Validate	Discussion	Problem Solve	Label	Model	Reinforce	Diffuse	Instruct	Activities/ Preplanning

Strategy	Reported		Strategy	Reported	
1. Comfort	1 = Yes	2 = No	6. Model	1 = Yes	2 = No
2. Acknowledge	1 = Yes	2 = No	7. Reinforce	1 = Yes	2 = No
3. Discussion	1 = Yes	2 = No	8. Diffuse	1 = Yes	2 = No
4. Problem Solve	1 = Yes	2 = No	9. Instruct	1 = Yes	2 = No
5. Label	1 = Yes	2 = No	10. Activities/Preplanning	1 = Yes	2 = No
Total Number of Reported Strategies =			Total Score =		

Inter-rater Reliability

Percentage of Agreement

Number of Agreement / Number of Agreement + Number of Disagreement =

Number of Agreement

	Coder 2		Total
	Yes	No	
Coder 1 Yes			
No			
Total			

Cohen's Kappa

K =

APPENDIX C:
CORRESPONDENCE

Date

Dear Early Childhood Expert:

Because of your experience working with preschool-aged children as an early childhood educator, we need your expertise and assistance. For a master's thesis, we are conducting a study on the socialization strategies used by early childhood educators to teach preschoolers about regulating and controlling their emotions. No research for teachers was found in this area, therefore, we are developing our own instrument, the "Preschool Teacher's Responses to Children's Emotions (PTRCE) survey." We would appreciate your critique of the PTRCE survey. The responses we receive from you and other early childhood experts will be summarized and used in the preparation of the final instrument.

The purpose of our study is to determine the type and frequency of socialization strategies used by preschool teachers in teaching children how to regulate heightened levels of emotion such as fear, sadness, happiness, and anger. The PTRCE survey will be mailed to early childhood educators in Iowa. The participants will be asked to read 12 typical emotion-provoking situations (e.g., fear, sadness, happiness, and anger) a target child may experience when interacting with adults and peers in the preschool setting. Then, the educator will be asked how often they would use each of the six socialization strategies from 1 (Never) to 4 (Always).

As you review the PTRCE survey, please complete the attached reaction sheet concerning the suitability of each situation. For example, would you typically observe these 12 situations in the preschool setting? In addition, we have asked several questions regarding the readability of the PTRCE Survey (e.g., the order of the situations and the format). Please return the reaction sheet to the PTRCE Survey to Mona Berkey's Child Development Building mailbox by Friday, April 23.

As you have questions or comments about this request, please e-mail or phone us. In advance, we appreciate your time and assistance in our research study.

Sincerely,

Mona Berkey
M.S. Student
mdiaz@iastate.edu
(515) 572-4976

Dr. Joan Herwig
Co-Major Professor
jherwig@iastate.edu
(515) 294-6230

Dr. Paula McMurray-Schwarz
Co-Major Professor
paulamc@iastate.edu
(515) 294-0785

Enclosure

**Reaction Sheet to
Preschool Teachers' Responses to Children's Emotions (PTRCE) Survey**

Situations	Realistic Situations (Circle one)	Comments/Suggestions (and/or make comments/suggestions directly on the PTRCE survey)
Situation 1	Yes / No	
Situation 2	Yes / No	
Situation 3	Yes / No	
Situation 4	Yes / No	
Situation 5	Yes / No	
Situation 6	Yes / No	
Situation 7	Yes / No	
Situation 8	Yes / No	
Situation 9	Yes / No	
Situation 10	Yes / No	
Situation 11	Yes / No	
Situation 12	Yes / No	

Please answer the questions on the back of this sheet

1. Would you change the order of the situations? If so, how?
2. Would you change the order of the six responses? If so, how?
3. Would you change the format of the survey? If so, how?
4. Would you use the pronoun he/she when referring to the target child in each situation? If not, what do you recommend?

Thank you for your time and effort!☺

Date

Dear Child Care Director:

I am an Early Childhood Education master's student at Iowa State University. As part of my masters program, I am conducting a study, with my major professor Dr. Joan Herwig, on the influence of teachers in the emotional development of preschoolers. We have designed a study to help us better understand how preschool teachers help children in controlling or managing their emotions.

We are inviting preschool teachers in Iowa to participate in this study by completing the Preschool Teacher's Responses to Children's Emotion (PTRCE) survey. The PTRCE survey requires teachers to read 12 typical emotion-provoking situations a target child might experience when interacting with adults and peers in a preschool setting. Then, the teacher is asked how often they would use each of six responses from 1 (Never) to 5 (Always). Examples of the six responses include comforting the target child, discussing the situation with the target child, and distracting the target child's attention away from the situation. The PTRCE survey requires about 30 minutes to complete.

We are seeking your permission to survey two of your preschool lead teachers of typically developing 3-and 4-year old children. The first lead teacher you nominated will be mailed an information letter describing the purpose of this study, a copy of the PTRCE survey, and a pre-addressed postage-paid envelope **as soon as we receive your signed consent form**. The second nominated teacher will be considered an alternate. We hope you will help us with this study.

Your participation in this study is voluntary, and your center or nominated teacher may withdraw from the study at any time. All obtained information will be kept confidential. No child care program, director, or nominated teacher will be identified by name in the final research report or future reports about this study. An identification number will be randomly assigned to each individual throughout the research process. Only group data will be presented and results of the study will be presented in my master's thesis, in future journal articles, and presentations at professional meetings. Teachers who choose to participate will receive a complementary brochure and summary letter of major findings at the completion of our study.

If you choose to have your center participate, please complete and return the attached consent form in the pre-addressed postage paid envelop provided. If you have any questions or desire clarification, please call me (515) 572-4976 or contact Dr. Herwig (515) 294-6230. Your support and cooperation of this study is greatly appreciated.

Sincerely,

Mona D. Berkey
M.S. HDFS-ECE Student

Joan E. Herwig, Ph.D.
Major Professor in Charge of Research

INFORMED CONSENT

Iowa State University

Title of Study: Preschool teachers' strategies of socializing children's emotion regulation.

Purpose: The purpose of this study is to examine the type and frequency of socialization strategies used by preschool teachers when regulating young children's emotions in the preschool setting. The study is being conducted by a graduate student and faculty member in the Human Development and Family Studies Department and has been approved by the Iowa State University Human Subjects Review Committee.

Procedure: Sixty preschool teachers of Iowa will be invited to complete the Preschool Teachers' Responses to Children's Emotions (PTRCE) survey. The PTRCE survey measures the socialization strategies teachers use to regulate children's naturally occurring emotions in the preschool setting.

Risk: Participation in this study is completely voluntary. The survey presents little or no risk to the teacher or child care center involved. If the director of the child care center or teacher feels uncomfortable in participating he/she may withdraw at anytime without penalty.

Benefits: Information gained will provide an understanding on how early childhood educators regard children's emotion regulation in the preschool setting.

Confidentiality: Every effort will be made to ensure confidentiality of the participating child care center, director, and teacher. Analysis of the data will involve group comparisons only. Code numbers will be used to record information gained from the survey. Matching lists of names and code numbers will be locked in a separate file.

I fully understand the involvement of the child care center I represent and give my permission for two teachers of 3- and 4-year old children from my child care center to participate. The second nominated teacher will be considered an alternate. I also understand that all information provided will be kept confidential. I am aware that the child care center I represent and the teacher's participation are voluntary and that we may withdraw from the study at anytime.

(Director's Signature)

(Date)

(Name of Early Childhood Program)

(Street)

(Telephone Number)

(City)

(State)

(Zip Code)

(Name of First Nominated Teacher)

(Name of Second Nominated Teacher)

I am not willing for my child care center to participate in this study.

(Director's Signature)

(Date)

(Name of Early Childhood Program)

Date

Dear Teacher:

I am a master's student in the department of Human Development and Family Studies with a specialization in Early Childhood Education at Iowa State University. As part of my masters program, I am conducting a study, with my major professor, Dr. Joan Herwig, on the influence of teachers in the emotional development of preschoolers. We hope this study will help us better understand how preschool teachers help typically developing four-year-olds deal with their emotions when interacting with adults and peers in the preschool setting.

The study has been approved by the University Human Subjects Review Committee at Iowa State University and the director of your child care center. Your director has given us your name and work address. We are inviting preschool teachers in Iowa to participate in this study by completing the enclosed Preschool Teacher's Response to Children's Emotions (PTRCE) survey. The PTRCE survey requires about 30 minutes of your time to complete. We hope you will help us with this study.

Your participation in this study is voluntary, and you may withdraw from the study at any time. Your name, personal information, and survey data will be kept confidential. An identification number will be randomly assigned to your survey throughout the research process. Only group data will be presented and results of the study will be presented in my master's thesis, in future journal articles, and presentations at professional meetings.

If you choose to participate, please complete and return the PTRCE survey in the stamped addressed, return envelope provided. To express our appreciation for your time and help in our study, a complementary brochure and research summary letter will be mailed to you at the completion of our study. If you have any questions, please call me (515) 572-4976 or contact Dr. Herwig (515) 294-6230.

Sincerely,

Mona D. Berkey
M.S. HDFSECE Student

Joan E. Herwig, Ph.D.
Major Professor in Charge of Research

Enclosure

Teacher Postcard Reminder**(Front)**

Mona D. Berkey
Iowa State University
Human Development and Family Studies
101 Child Development Building
Ames, Iowa 50011-1030

Name of Teacher
Name of Child Care Center
Child Care Center Address

(Back)

Dear Teacher:

Date

About two weeks ago, we mailed you a survey to help us learn more about how preschool teachers help young children deal with their emotions. As of today, we have not yet received your completed Preschool Teachers' Responses to Children's Emotions (PTRCE) survey.

If you have already completed and mailed the PTRCE survey, we are grateful for your participation. If you have not been able to complete the PTRCE survey, we hope you will do so at your earliest convenience.

We appreciate your time and effort in helping us with our study.

Sincerely,

Mona D. Berkey
M.S. HDFS-ECE Student

Joan E. Herwig
Major Professor in Charge of Research

Date

Dear Teacher:

About three weeks ago we mailed you a copy of the Preschool Teachers' Responses to Children's Emotions (PTRCE) survey. You were among other Iowa preschool teachers who were selected to share with us their responses on how they help children in controlling or managing their emotions in the preschool setting. As of today, we have not yet received your completed survey.

We are writing you again to express the importance of your participation and usefulness of this study. The purpose of the survey is to help us better understand how preschool teachers help typically developing four-year-olds deal with their emotions when interacting with adults and peers. We hope the results of the study will help preschool teachers in supporting young children's social and emotional development. In order for the results of this study to be truly representative of the opinions of all preschool teachers, we need your participation.

In case our earlier mailing did not reach you or it was lost, we have enclosed a second copy of the PTRCE survey. We urge you to complete and mail it today in the enclosed stamped addressed return envelope. Your time and effort in this study is greatly appreciated.

Again, if you have any questions about this study, please feel free to contact me (515) 572-4976 or contact Dr. Herwig (515) 294-6230. Please accept our sincere thanks for your cooperation.

Sincerely,

Mona D. Berkey
M.S. HDFS-ECE Student

Joan E. Herwig, Ph.D.
Major Professor in Charge of Research

Enclosure: Survey and return envelope

APPENDIX D:
TABLES OF PRESCHOOL TEACHERS' DEMOGRAPHIC CHARACTERISTICS BY
ACCREDITED AND NON-ACCREDITED CHILD CARE PROGRAMS

Table D1

Preschool teachers' demographic characteristic of age by accredited and non-accredited child care programs

Characteristic	Accredited (n = 24)			Non-Accredited (n = 23)		
	<u>M</u>	<u>SD</u>	Range	<u>M</u>	<u>SD</u>	Range
Age (Years)	35.7	8.9	22-55	39.3	11.0	23-59

Note: $F(1, 45) = 1.45, p = .24$

Table D2

Preschool teachers' demographic characteristic of teaching role by accredited and non-accredited child care programs

Characteristic	Accredited (n = 24)		Non-Accredited (n = 23)	
	Frequency (%)		Frequency (%)	
Teaching Role				
Head/Lead Teacher	17	(70.8)	12	(52.2)
Director/Lead Teacher	7	(29.2)	0	(39.1)
Assistant Director/Lead Teacher	0	(0)	2	(8.7)

Note. $\chi^2 = 4.52, p = .11, df = 2$

Table D3

Preschool teachers' demographic characteristic of ethnic identification by accredited and non-accredited child care programs

Characteristic	Accredited (n = 24)		Non-Accredited (n = 23)	
	Frequency (%)		Frequency (%)	
Ethnic Identification				
Latino/Hispanic	0	(0)	1	(4.3)
White/Caucasian	24	(100)	22	(95.7)

Note. $\chi^2 = 1.01, p = .30, df = 1$

Table D4

Preschool teachers' demographic characteristic of education level by accredited and non-accredited child care programs

Characteristic	Accredited (n = 24) Frequency (%)	Non-Accredited (n = 23) Frequency (%)
Education Level		
Some College	3 (12.5)	2 (8.7)
CDA Credential	2 (8.3)	2 (8.7)
Junior College or Equivalent	2 (8.3)	5 (21.7)
B.A./B.S. Degree	12 (50.0)	12 (52.2)
M.A./M.S.	5 (20.8)	2 (8.7)

Note. $\chi^2 = 2.75$, $p = .60$ $df = 4$

Table D5

Preschool teachers' demographic characteristic of years of teaching experience by accredited and non-accredited child care programs

Characteristic	Accredited (n = 24)			Non-Accredited (n = 23)		
	<u>M</u>	<u>SD</u>	Range	<u>M</u>	<u>SD</u>	Range
Teaching Experience (Years)	9.5	6.4	1-21	9.2	8.2	1-29

Note: $F(1, 45) = 0.02$, $p = .90$

APPENDIX E:
PAIRED T-TEST RESULTS FOR ALL POSSIBLE PAIRWISE DIFFERENCES
BETWEEN PRESCHOOL TEACHERS' TOTAL MEAN SCORES ON THE
SIX SOCIALIZATION STRATEGIES IN THE POSITIVE AND NEGATIVE
SITUATIONS

Table E1

Paired t-test results from all possible pairwise differences between preschool teachers' total mean scores on the six socialization strategies in the happiness situations by magnitude of the t-statistic

Pairs of Strategies	<u>M</u>	t-statistic	<u>p</u>
Discuss Happiness Ignore Happiness	4.36 1.66	20.32	.000*
Ignore Happiness Instruct Happiness	1.66 3.73	-11.19	.000*
Match Happiness Discuss Happiness	2.34 4.36	-11.13	.000*
Discuss Happiness Comfort Happiness	4.36 2.85	9.94	.000*
Ignore Happiness Distract Happiness	1.66 3.15	-8.88	.001*
Discuss Happiness Distract Happiness	4.36 3.15	8.28	.000*
Match Happiness Instruct Happiness	2.34 3.73	-6.45	.000*
Ignore Happiness Comfort Happiness	1.66 2.85	-5.95	.000*
Discuss Happiness Instruct Happiness	4.36 3.73	4.55	.000*
Instruct Happiness Comfort Happiness	3.73 2.85	4.34	.000*
Match Happiness Distract Happiness	2.34 3.15	-3.81	.000*
Instruct Happiness Distract Happiness	3.73 3.15	3.57	.001*
Match Happiness Ignore Happiness	2.34 1.66	3.72	.001*
Comfort Happiness Match Happiness	2.85 2.34	2.72	.009*
Comfort Happiness Distract Happiness	2.85 3.15	-1.68	.100

Note. * $p < .05$. (2-tailed) df = 45

Table E2

Paired t-test results from all possible pairwise differences between preschool teachers' total mean scores on the six socialization strategies in the sadness situations by magnitude of the t-statistic

Pairs of Strategies	<u>M</u>	t-statistic	<u>p</u>
Ignore Sadness Comfort Sadness	1.13 4.72	-46.80	.000*
Discuss Sadness Ignore Sadness	4.60 1.13	35.29	.000*
Ignore Sadness Distract Sadness	1.13 3.32	-13.81	.000*
Ignore Sadness Instruct Sadness	1.13 3.33	-12.59	.000*
Match Sadness Comfort Sadness	2.78 4.72	-9.29	.000*
Comfort Sadness Distract Sadness	4.72 3.32	8.86	.000*
Match Sadness Discuss Sadness	2.78 4.60	-8.51	.000*
Instruct Sadness Comfort Sadness	3.33 4.72	-7.75	.000*
Discuss Sadness Distract Sadness	4.60 3.32	7.60	.000*
Discuss Sadness Instruct Sadness	4.60 3.33	7.38	.000*
Match Sadness Ignore Sadness	2.78 1.13	4.84	.000*
Match Sadness Instruct Sadness	2.78 3.33	-2.02	.050*
Match Sadness Distract Sadness	2.78 3.32	-2.13	.038*
Discuss Sadness Comfort Sadness	4.60 4.72	-2.21	.032*
Instruct Sadness Distract Sadness	3.33 3.32	.043	.966

Note. *p < .05. (2-tailed) df = 45

Table E3

Paired t-test results from all possible pairwise differences between preschool teachers' total mean scores on the six socialization strategies in the anger situations by magnitude of the t-statistic

Pairs of Strategies	<u>M</u>	t-statistic	<u>p</u>
Discuss Anger Ignore Anger	4.37 1.96	18.09	.000*
Match Anger Discuss Anger	2.08 4.37	-14.87	.000*
Ignore Anger Comfort Anger	1.96 3.78	-11.31	.000*
Match Anger Comfort Anger	2.08 3.78	-9.74	.000*
Discuss Anger Distract Anger	4.37 3.11	8.86	.000*
Ignore Anger Instruct Anger	1.96 3.52	-8.08	.000*
Ignore Anger Distract Anger	1.96 3.11	-7.44	.000*
Match Anger Instruct Anger	2.08 3.52	-7.32	.000*
Discuss Anger Instruct Anger	4.37 3.52	6.90	.000*
Discuss Anger Comfort Anger	4.37 3.78	6.23	.000*
Match Anger Distract Anger	2.08 3.11	-5.06	.000*
Comfort Anger Distract Anger	3.78 3.11	4.93	.000*
Instruct Anger Distract Anger	3.52 3.11	2.37	.021*
Instruct Anger Comfort Anger	3.52 3.78	-1.60	.117
Match Anger Ignore Anger	2.08 1.96	0.62	.539

Note. * $p < .05$. (2-tailed) $df = 45$

Table E4

Paired t-test results from all possible pairwise differences between preschool teachers' total mean scores on the six socialization strategies in the fear situations by magnitude of the t-statistic

Pairs of Strategies	<u>M</u>	t-statistic	<u>p</u>
Ignore Fear Comfort Fear	1.23 4.58	-31.65	.000*
Discuss Fear Ignore Fear	4.34 1.23	29.92	.000*
Match Fear Comfort Fear	2.12 4.58	-14.07	.000*
Match Fear Discuss Fear	2.12 4.34	-12.39	.000*
Ignore Fear Instruct Fear	1.23 3.21	-12.31	.000*
Comfort Fear Distract Fear	4.58 2.65	11.92	.000*
Discuss Fear Distract Fear	4.34 2.65	9.60	.000*
Ignore Fear Distract Fear	1.23 2.65	-8.40	.000*
Instruct Fear Comfort Fear	3.21 4.58	-8.26	.000*
Discuss Fear Instruct Fear	4.34 3.21	7.34	.000*
Match Fear Instruct Fear	2.12 3.21	-4.84	.000*
Match Fear Ignore Fear	2.12 1.23	4.50	.000*
Instruct Fear Distract Fear	3.21 2.65	2.95	.005*
Discuss Fear Comfort Fear	4.34 4.58	-2.95	.005*
Match Fear Distract Fear	2.12 2.65	-2.38	.021*

Note. * $p < .05$. (2-tailed) df = 45.

APPENDIX F:
CODING MAP

CODING MAP

Column	Variable Name	Variable	Variable Value
1-3	ID Number	ID	Accredited Programs (101-130) Non-Accredited Programs (201-230)
4	Program	PROG	1 = Accredited 2 = Non-Accredited
5	Teaching Experience	TEX	Raw number
6	Teaching Role	ROLE	1 = Head Teacher/Lead Teacher 2 = Director/Head Teacher 3 = Assistant Director/Lead Teacher 4 = Assistant/Teacher Associate 5 = Other 999 = Missing
7	Teacher Education	EDU	1 = Some High School 2 = High School Diploma 3 = CDA Certification 4 = Some College 5 = Junior College or Equivalent 6 = B.A./B.S. Degree 7 = M.A./M.S. Degree 8 = Other 999 = Missing
8	Sex	SEX	1 = Male 2 = Female
9	Age	AGE	Raw number
10	Racial/Ethnic Identification	RACE	1 = Asian or Pacific Islander 2 = Native American/ American Indian 3 = Black/African American 4 = Latino(a)/Hispanic 5 = White/Caucasian 6 = Other 999=Missing
11	Emotion Preparation	EPREP	1 = Very Unprepared 2 = Fairly Unprepared 3 = Fairly Well Prepared 4 = Very Well Prepared 999 = Missing

Column	Variable Name	Variable	Variable Value
12	Emotion Confidence	ECONF	1 = Not Confident 2 = Fairly Confident 3 = Confident 999 = Missing
13	Situation 1/ Match Anger	S1M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
14	Situation 1/ Discuss Anger	S1D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
15	Situation 1/ Ignore Anger	S1I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
16	Situation 1 / Instruct Anger	S1IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
17	Situation 1 / Comfort Anger	S1C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
18	Situation 1 / Distract Anger	S1DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
20	Situation 2/ Match Fear	S2M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING

Column	Variable Name	Variable	Variable Value
21	Situation 2/ Discuss Fear	S2D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
22	Situation 2/ Ignore Fear	S2I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
23	Situation 2 / Instruct Fear	S2IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
24	Situation 2 / Comfort Fear	S2C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
25	Situation 2 / Distract Fear	S2DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
26	Situation 3/ Match Sadness	S3M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
27	Situation 3/ Discuss Sadness	S3D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
28	Situation 3/ Ignore Sadness	S3I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING

Column	Variable Name	Variable	Variable Value
29	Situation 3 / Instruct Sadness	S3IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
30	Situation 3/ Comfort Sadness	S3C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
31	Situation 3 / Distract Sadness	S3DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
32	Situation 4/ Match Happiness	S4M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
33	Situation 4/ Discuss Happiness	S4D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
34	Situation 4/ Ignore Happiness	S4I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
35	Situation 4 / Instruct Happiness	S4IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
36	Situation 4/ Comfort Happiness	S4C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING

Column	Variable Name	Variable	Variable Value
37	Situation 4 / Distract Happiness	S4DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
38	Situation 5/ Match Fear	S5M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
39	Situation 5/ Discuss Fear	S5D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
40	Situation 5/ Ignore Fear	S5I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
41	Situation 5/ Instruct Fear	S5IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
42	Situation 5 / Comfort Fear	S5C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
43	Situation 5/ Distract Fear	S5DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
44	Situation 6/ Match Sadness	S6M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
45	Situation 6/ Discuss Sadness	S6D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING

Column	Variable Name	Variable	Variable Value
46	Situation 6/ Ignore Sadness	S6I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
47	Situation 6/ Instruct Sadness	S6IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
48	Situation 6 / Comfort Sadness	S6C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
49	Situation 6 / Distract Sadness	S6DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
50	Situation 7/ Match Happiness	S7M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
51	Situation 7/ Discuss Happiness	S7D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
52	Situation 7/ Ignore Happiness	S7I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
53	Situation 7 / Instruct Happiness	S7IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING

Column	Variable Name	Variable	Variable Value
54	Situation 7/ Comfort Happiness	S7C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
55	Situation 7/ Distract Happiness	S7DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
56	Situation 8/ Match Happiness	S8M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
57	Situation 8/ Discuss Happiness	S8D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
58	Situation 8/ Ignore Happiness	S8I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
59	Situation 8/ Instruct Happiness	S8IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
60	Situation 8/ Comfort Happiness	S8C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
61	Situation 8/ Distract Happiness	S8DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
62	Situation 9/ Match Sadness	S9M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING

Column	Variable Name	Variable	Variable Value
63	Situation 9/ Discuss Sadness	S9D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
64	Situation 9/ Ignore Sadness	S9I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
65	Situation 9/ Instruct Sadness	S9IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
66	Situation 9/ Comfort Sadness	S9C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
67	Situation 9/ Distract Sadness	S9DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
68	Situation 10/ Match Fear	S10M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
69	Situation 10/ Discuss Fear	S10D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
70	Situation 10/ Ignore Fear	S10I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
71	Situation 10/ Instruct Fear	S10IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING

Column	Variable Name	Variable	Variable Value
72	Situation 10/ Comfort Fear	S10C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
73	Situation 10/ Distract Fear	S10DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
74	Situation 11/ Match Anger	S11M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
75	Situation 11/ Discuss Anger	S11D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
76	Situation 11/ Ignore Anger	S11I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
77	Situation 11/ Instruct Anger	S11IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
78	Situation 11/ Comfort Anger	S11C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
79	Situation 11/ Distract Anger	S11DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
80	Situation 12/ Match Anger	S12M	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING

Column	Variable Name	Variable	Variable Value
81	Situation 12/ Discuss Anger	S12D	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
82	Situation 12/ Ignore Anger	S12I	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
83	Situation 12/ Instruct Anger	S12IN	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
84	Situation 12/ Comfort Anger	S12C	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
85	Situation 12/ Distract Anger	S12DT	1 = NEVER 2 = SELDOM 3 = SOMETIMES 4 = USUALLY 5 = ALWAYS 9 = MISSING
86	Comfort Strategy	COMFORT	1 = Yes 2 = No 999 = Missing
87	Acknowledge Strategy	ACKNOWL	1 = Yes 2 = No 999 = Missing
88	Discussion Strategy	DISCUSS	1 = Yes 2 = No 999 = Missing
89	Problem Solve Strategy	PROBSOLV	1 = Yes 2 = No 999 = Missing
98	Label Strategy	LABEL	1 = Yes 2 = No 999 = Missing
99	Model Strategy	MODEL	1 = Yes 2 = No 999 = Missing
100	Reinforce Strategy	REINF	1 = Yes 2 = No 999 = Missing
101	Diffuse Strategy	DIFFUSE	1 = Yes 2 = No 999 = Missing

Column	Variable Name	Variable	Variable Value
102	Activities/Preplanning Strategy	ACTIVIT	1 = Yes 2 = No 999 = Missing
103	Instruct Strategy	INSTRUCT	1 = Yes 2 = No 999 = Missing
104	Total Strategies	TOTAL	Raw Number
105	Match Happiness	MH	Raw Number (mean of: S4M, S7M, S8M)
106	Match Sadness	MS	Raw Number (mean of: S3M, S6M, S9M)
107	Match Anger	MA	Raw Number (mean of: S1M, S11M, S12M)
108	Match Fear	MF	Raw Number mean of: S2M, S5M, S10M)
109	Discuss Happiness	DH	Raw Number (mean of: S4D, S7D, S8D)
110	Discuss Sadness	DS	Raw Number (mean of: S3D, S6D, S9D)
111	Discuss Anger	DA	Raw Number (mean of: S1D, S11D, S11D)
112	Discuss Fear	DF	Raw Number (mean of: S2D, S5D, S10D)
113	Ignore Happiness	IH	Raw Number (mean of: S4I, S7I, S8I)
114	Ignore Sadness	IS	Raw Number (mean of: S3I, S6I, S9I)
115	Ignore Anger	IA	Raw Number (mean of: S1I, S11I, S12I)
116	Ignore Fear	IF	Raw Number (mean of: S2I, S5I, S10I)
117	Instruct Happiness	INH	Raw Number (mean of: S4IN, S7IN, S8IN)
118	Instruct Sadness	INS	Raw Number (mean of: S3IN, S6IN, S9IN)
119	Instruct Anger	INA	Raw Number (mean of: S1IN, S11IN, S12IN)
120	Instruct Fear	INF	Raw Number (mean of: S2IN, S5IN, S10IN)
121	Comfort Happiness	CH	Raw Number (mean of: S4C, S7C, S8C)
122	Comfort Sadness	CS	Raw Number (mean of: S3C, S6C, S9C)
123	Comfort Anger	CA	Raw Number (mean of: S1C, S11C, S12C)

Column	Variable Name	Variable	Variable Value
124	Comfort Fear	CF	Raw Number (mean of: S2C, S5C, S10C)
125	Distract Happiness	DTH	Raw Number (mean of: S4DT, S7DT, S8DT)
126	Distract Sadness	DTS	Raw Number (mean of: S3DT, S6DT, S9DT)
127	Distract Anger	DTA	Raw Number (mean of: S1DT, S11DT, S12DT)
128	Distract Fear	DTF	Raw Number (mean of: S2DT, S5DT, S10DT)
129	Total Match Score	TM	Raw Number (mean of: MH, MS, MA, MF)
120	Total Discussion Score	TD	Raw Number (mean of: DH, DS, DA, DF)
121	Total Ignore Score	TI	Raw Number (mean of: IH, IS, IA, IF)
122	Total Instruct Score	TIN	Raw Number (mean of: INH, INS, INA, INF)
123	Total Comfort Score	TC	Raw Number (mean of: CH, CS, CA, CF)
124	Total Distract Score	TDT	Raw Number (mean of DTH, DTS, DTA, DTF)

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